	2) INFORMATION FOR SEQ ID NO: 865	
5	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1052 bases (B) TYPE: Nucleic acid	
10	(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
15	(vi) ORIGINAL SOURCE:(A) ORGANISM: Cryptosporidium parvum	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865	
20	AAGCTCAAGG CTGAGAGAGA AAGAGGTATT ACCATCGATA TTGCTTTATG GCAATTCGAA ACCCCAAAAT ACCACTACAC TGTCATTGAT GCCCCAGGTC ACAGAGATTT CATCAAGAAT ATGATTACTG GTACCTCTCA AGCTGATGTT GCTTTATTGG TTGTCCCAGC CGATCGTTTC GAAGGTGCCT TCTCCAAGGA AGGTCAAACC AGAGAACATG CTTTATTGGC CTTCACTTTG GGTGTCAGAC	50 100 150 200 250
25	AAATGATTGT CGGTATTAAC AAGATGGATA CCTGTGAATA CAAGCAATCT CGTTTTGATG AAATCTTCAA CGAAGTTGAT GGTTACCTCA AGAAGGTTGG TTACAACACC GAGAAGATCC CATTCGTTGC CATTTCTGGT TTCGTTGGTG ATAATATGGT TGAGAGATCT GACAAGATGC CATGGTATAA GGGTAAGACC	300 350 400 450
30	TTAGTCGAAG CCCTCGACAC TATGGAACCA CCAAAGAGAC CAACTGACAA GCCACTCCGT CTCCCATTAC AAGATGTTTA CAAGATAGGT GGTGTAGGTA CTGTCCCAGT CGGTCGTGTT GAGACTGGTA TCATCAGACC AGGTATGAAT GTTACCTTCG CTCCAGCTGG TGTTACCACT GAAGTTAAGT CAGTAGAAAT GCACCATGAG CAGATGCCAG AGGCCGTCCC AGGTGACAAC GTTGGTTTCA	500 550 600 650 700 750
35	ATGTTAAGAA CGTCTCCATC AAGGATATCA AGAGAGGTTT CGTTGCTTCT GATGCCAAGA ATGACCCAGC TAAGGGCTGT GAAGACTTCA CTGCTCAAGT TATCGTCCTC AACCACCCAG GTGAAATCAA GAACGGTTAC TCTCCAGTCG TTGACTGTCA CACCGCTCAC ATTTCCTGCA AATTCCAGAC TATCACTGCT AAGATGGACA AGAGATCTGG TAAGGTTTTG GAAGAAAACC CAAAGCTTAT CAAGTCTGGT GATGCTGCTT TGGTTGTTAT GCAACCTTTTG AAGCCACTTT	800 850 900 950 1000
40	GTGTTGAGGC CTTCACTGAC TACCCACCTC TAGGTCGTTT CGCTGTCCGT GA	1050 1052
45	2) INFORMATION FOR SEQ ID NO: 866	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 837 bases (B) TYPE: Nucleic acid	
50	(C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
55	(vi) ORIGINAL SOURCE:(A) ORGANISM: Staphylococcus saprophyticus(B) STRAIN: ATCC 35552	

60 CAATGAAGTT CCAGAAATTA ACAATGCCTT AGTCGTAGAC GTTGAAAGAG 50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866

	ATGAAGGTAC	AGTATCTCTT	ACATTAGAAG	TGGCATTACA	ACTTGGCGAT	100
	GATGTCGTAC	GTACAATTGC	AATGGATTCT	ACTGATGGTG	TTAAACGTGG	150
	TACAGAAGTT	CGAGATAGCG	GAGATAGCAT	CAGTGTTCCA	GTTGGTGATG	200
	CTACGTTAGG	ACGTGTGTTT	AATGTTCTTG	GTGATACAAT	TGACTTAGAC	250
5	GAGAAGCTTG	ATACTTCTGT	CAAACGTGAT	CCAATTCATA	GAGAAGCACC	300
	TGCATTCGAT	CAATTATCAA	CAAAAGTTGA	AATCTTAGAA	ACAGGTATTA	350
	AAGTAATTGA	TTTACTTGCA	CCATATATTA	AAGGTGGTAA	AATCGGTTTA	400
	TTCGGTGGCG	CTGGTGTAGG	TAAAACAGTA	TTAATTCAAG	AATTAATTAA	450
	TAATATAGCT	CAAGAACATG	GTGGTATTTC	AGTATTTGCC	GGCGTAGGTG	500
10	AACGTACGCG	TGAAGGTAAT	GACTTATACT	ACGAAATGAG	TGATAGTGGT	550
	GTTATTAAGA	AAACAGCTAT	GGTCTTCGGA	CAAATGAATG	AGCCACCTGG	600
	TGCGCGTATG	CGTGTTGCTT	TATCAGGCTT	AACAATGGCT	GAACACTTCC	650
	GTGATGTACA	AGGACAAGAT	GTTTTACTAT	TTATTGATAA	CATATTCAGA	700
	TTTACGCAAG	CTGGTTCAGA	AGTATCAGCA	CTATTAGGTC	GTATGCCATC	750
15	AGCCGTTGGT	TATCAACCTA	CCCTTGCTAC	TGAAATGGGT	CAATTACAAG	800
	AACGTATTAC	ATCAACAACT	AAAGGATCTG	TAACGTC		837

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 818 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Genomic DNA
- 30 (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Zoogloea ramigera
 - (B) STRAIN: ATCC 25935
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867

35 AAGGTATTCG ATGCCTTGAA AATGGAAGGC TCCGAGCTGA CCCTGGAAGT ACAACAGCAG CTGGGCGACG GCATTGTCCG TACCATTGCA CTGGGTACCT 100 CCGACGGCCT GCGTCGCGGC ATGATGATCC AGAACACCGG CAAACCTATC ATGGTGCCAG TCGGTAAAGC AACCCTGGGT CGCATCATGG ACGTGCTGGG 150 200 TAACCCGATC GACGAATGCG GCGCGGTCGC TCACGACCAG ATCGCTTCGA 40 250 TCCACCGCGC TCCTCCTGCG TACGACGAAC TGTCGCCATC GCAAGATCTG 300 CTGGAAACCG GCATTAAAGT TATTGACCTG GTGTGCCCGT TCGCCAAGGG 350 CGGTAAAGTC GGTCTGTTCG GCGGTGCAGG TGTGGGCAAG ACCGTGAACA 400 TGATGGAACT GATCAACAAC ATCGCCAAAG CACACTCGGG TCTGTCCGTG 450 TTTGCCGGTG TGGGTGAGCG TACCCGTGAA GGTAACGACT TCTACCACGA 500 GATGGCTGAC GCCAAAGTGG TCGATCTGGA AAATCCAGAG AACTCCAAGG 550 TTGCGATGGT CTACGGTCAG ATGAATGAAC CACCAGGCAA CCGTCTGCGC 600 GTGGCGCTGA CCGGTCTGAC CATGGCTGAA GCATTCCGTG ACGAAGGCAA 650 AGACGTTCTG TTCTTCGTGG ACAACATCTA CCGCTTCACC CTGGCCGGTA 700 50 CCGAAGTATC GGCACTGCTG GGCCGTATGC CATCGGCTGT GGGTTACCAG 750 CCTACGCTGG CCGAAGAAAT GGGTCGCCTG CAAGAGCGCA TCACTTCGAC 800 CAAGACCGGT TCGATCAC 818

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- 2) INFORMATION FOR SEQ ID NO: 868
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 778 bases
- 60 (B) TYPE: Nucleic acid

(C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA 5 (vi) ORIGINAL SOURCE: (A) ORGANISM: Staphylococcus saprophyticus (B) STRAIN: ATCC 43867 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868 10 CTATCTTAGT AGTATCTGCT GCTGATGGCC CAATGCCACA AACTCGTGAA CACATTCTTT TATCACGTAA CGTTGGTGTT CCAGCATTAG TTGTATTCTT AAACAAAGTT GACATGGTTG ACGATGAAGA ATTATTAGAA TTAGTAGAAA TGGAAGTTCG TGACTTATTA AGCGAATATG ACTTCCCAGG TGACGATGTA CCTGTAATCT CTGGTTCTGC ATTAAAAGCT TTAGAAGGCG ACGCTGACTA 250 TGAGCAAAAA ATCTTAGACT TAATGCAAGC TGTTGATGAC TTCATTCCAA CACCAGAACG TGATTCTGAC AAACCATTCA TGATGCCAGT TGAGGACGTA 350 TTCTCAATCA CTGGTCGTGG TACTGTTGCT ACAGGCCGTG TTGAACGTGG 400 TCAAATCAAA GTCGGTGAAG AAATCGAAAT CATCGGTATG CAAGAAGAAT 450 20 CAAGCAAAAC AACTGTTACT GGTGTAGAAA TGTTCCGTAA ATTATTAGAC 500 TACGCTGAAG CTGGTGACAA CATTGGTGCA TTATTACGTG GTGTTTCACG 550 TGATGACGTA CAACGTGGTC AAGTTTTAGC TGCTCCTGGT ACTATTACAC 600 CACATACAAA ATTCAAAGCG GATGTTTACG TTTTATCTAA AGATGAAGGT 650 GGTCGTCATA CACCATTCTT CACTAACTAC CGCCCACAAT TCTATTTCCG 700 750 TACTACTGAC GTAACTGGTG TTGTTAACTT ACCAGAAGGT ACTGAAATGG 778 TTATGCCTGG CGATAACGTT GAAATGGA 30 2) INFORMATION FOR SEQ ID NO: 869 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 640 bases TYPE: Nucleic acid (B) 35 STRANDEDNESS: Double TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA 40 (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus casseliflavus (B) STRAIN: R689 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869 45 TGGTCCTATG CCTCAAACAC GTGAACACAT CTTGTTATCA CGTAACGTTG 50 GTGTACCATA CATCGTTGTT TTCTTAAACA AAATGGATAT GGTTGATGAC 100 GAAGAATTAC TAGAATTAGT TGAAATGGAA GTTCGTGACT TATTGTCAGA ATATGACTTC CCAGGCGACG ATGTTCCTGT AATCGCTGGT TCTGCTTTGA 150 200 50 AAGCTCTTGA AGGCGATGCT TCATACGAAG AAAAAATCAT GGAATTAATG 250 GCTGCAGTTG ACGAATACGT TCCAACTCCA GAACGTGACA CTGACAAACC

ATTCATGATG CCAGTCGAAG ACGTATTCTC AATCACTGGA CGTGGTACTG

TTGCTACAGG CCGTGTTGAA CGTGGACAAG TTCGCGTTGG TGACGAAGTT GAAATCGTTG GTATTGCTGA AGAAACTGCT AAAACAACTG TAACTGGTGT TGAAATGTTC CGTAAATTGT TAGACTATGC TGAAGCAGGG GATAACATTG GTGCATTGCT ACGTGGTGTT GCTCGTGAAG ACATCCAACG TGGACAAGTA TTGGCTAAAG CTGGTACAAT CACACCTCAT ACAAAATTTA AAGCTGAAGT

TTACGTTTTA ACAAAAGAAG AAGGTGGACG TCACACTCCA

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	2) INFORMATION FOR SEQ ID NO: 870	
5	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 644 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
10	(ii) MOLECULE TYPE: Genomic DNA	
15	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus casseliflavus (B) STRAIN: R754</pre>	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870	
20	GTCCTATGCC TCAAACACGT GAACACATCT TGTTATCACG TAACGTTGGT GTACCATACA TCGTTGTTTT CTTAAACAAA ATGGATATGG TTGATGACGA AGAATTACTA GAATTAGTTG AAATGGAAGT TCGTGACTTA TTGTCAGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCTGGTTC TGCTTTGAAA	50 100 150 200
25	GCTCTTGAAG GCGATGCTTC ATACGAAGAA AAAATCATGG AATTAATGGC TGCAGTTGAC GAATACGTTC CAACTCCAGA ACGTGACACT GACAAACCAT TCATGATGCC AGTCGAAGAC GTATTCTCAA TCACTGGACG TGGTACTGTT GCTACAGGCC GTGTTGAACG TGGACAAGTT CGCGTTGGTG ACGAAGTTGA	250 300 350 400
30	AATCGTTGGT ATTGCTGAAG AAACTGCTAA AACAACTGTA ACTGGTGTTG AAATGTTCCG TAAATTGTTA GACTATGCTG AAGCAGGGGA TAACATTGGT GCATTGCTAC GTGGTGTTGC TCGTGAAGAC ATCCAACGTG GACAAGTATT GGCTAAAGCT GGTACAATCA CACCTCATAC AAAATTTAAA GCTGAAGTTT ACGTTTTAAC AAAAGAAGAA GGTGGACGTC ACACACCATT CTTC	450 500 550 600 644
35	2) INFORMATION FOR SEQ ID NO: 871	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 637 bases (B) TYPE: Nucleic acid	
40	(C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
45	(vi) ORIGINAL SOURCE:(A) ORGANISM: Enterococcus flavescens(B) STRAIN: R758	
50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871	
	TCCTATGCCT CAAACACGTG AACACATCTT GTTATCACGT AACGTTGGTG TACCATACAT CGTTGTTTTC TTAAACAAAA TGGATATGGT TGATGACGAA GAATTACTAG AATTAGTTGA AATGGAAGTT CGTGACTTAT TGTCAGAATA TGACTTCCCA GGCGACGATG TTCCTGTAAT CGCTGGTTCT GCTTTGAAAG	50 100 150
55	CTCTTGAAGG CGATGCTTCA TACGAAGAAA AAATCATGGA ATTAATGGCT GCAGTTGACG AATACGTTCC AACTCCAGAA CGTGACACTG ACAAACCATT CATGATGCCA GTCGAAGACG TATTCTCAAT CACTGGACGT GGTACTGTTG CTACAGGCCG TGTTGAACGT GGACAAGTTC GCGTTGGTGA CGAAGTTGAA	200 250 300 350 400
60	ATCGTTGGTA TTGCTGAAGA AACTGCTAAA ACAACTGTAA CTGGTGTTGA AATGTTCCGT AAATTGTTAG ACTATGCTGA AGCAGGGGAT AACATTGGTG	450 500

GTCCTATGCC TCAMACTEGT CTTGAACAAA ATGGATATGG TTGATGACGA GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTCGACCTA TTGCTTGAAA AGAATTGCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC TGCAGTTGAC GAATACGTTC CAACTCCAGA ACGTGATACT GACAAACCAT TCATGATGCC AGTCGAAGAC GTATTCTCAA TCACTGGACG TGGTACAGTT AATCGTTGGT ATTGCTGACG AAACTGCTAA AACAACTGTA ACAGGTTAGA AATCGTTGGT ATTGCTGACG AAACTGCTAA AACAACTGTA ACAGGTGTTG GCATTGCTAC GTGGGGTTGC TCGTGAAGAC ATCCAACGTG GACAAGTATT GCATTGCTAC GAAAAGAAAA GGTGGACGTC ACACTCCATT CTT 2) INFORMATION FOR SEQ ID NO: 873 40 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGA ATGGATATGG TTGATGACAAA GCTCTCTACA GAGCGACGAT GTTCCTGTAAA TCGCCGGTTC TGCTTTGAAA GCTCTCTACAG GAGATCCTTC AAACTCGTAATCAT TGCTTTGAAA GCTCTCTACAG GAGATCCTTC AAACTCGTAAAAAAAAAA		CATTGCTACG TGGGGTTGCT CGTGAAGACA TCCAACGTGG ACAAGTATTA GCTAAAGCTG GTACAATCAC ACCTCATACA AAATTTAAAG CTGAAGTTTA CGTTTTAACA AAAGAAGAAG GTGGACGTCA CACTCCA	550 600 637
(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 643 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 15 (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R631 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872 GTCCTATGCC TCAAACTCGT GAACACACTCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTCCTA GAATTACTT CATTCACAGA AATGGATTATG TTGATGACGA ATGACTTCCC AGGGACCAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA AGAATTCCTA GAATACGTTC CAACTCCAGA ACGTGATACT TGTTTGAAA ATGACTACG GAATACCTC CAACTCCAGA ACGTGATACT GACTAAGACAT TCATGATGAC GAATACCTC CAACTCCAGA ACGTGATACT GACAAACCAT TCATGATGACC AGCTGAGAGA AGAATCCTTA ATGACTACA GAATACCATG GAATACCTTC CAACTCCAGA ACGTGATACT GACAAACCAT TCATGATGCC AGTCGAAGAC TGGACAGT GACAACTCT AATGATGCT AAACGTGTTG AATGATTGGT AATGACTTGA ACAGTGATA ACAGTGATACA AATGATTGGT ATTACCTGACG AAACTGCTAA AACAACTGTA ACAGTGATTG GACAAGACAT ACATTGGT GACAAGACAT GACAAGAACT ACACTCGTAA AAAATCAAAA GCGAAGAAACT GACAAACAACT GACAAACAACT AAAATCAAAA GCGAAGAAACT GACAAGAAA ATGAATACAAA GCGAAGAAA GCGAAGAAACT GACAAACTACA CACCTCCATAC AAAAATCAAAA GCGAAGATAT GACAAAGAAA GCGAAGAAACT CAACCTCCATAC AAAAATCAAAA GCGAAGATAT AAAATCAAAA GCGAAGAACAACT CAACTCCATAC AAAAATCAAAA GCGAAGATAT CAACCTCCATAC AAAAATCAAAA GCGAAGATAT GCCAAGAACT CAACTCCATAC AAAAATCAAAA GCTGAAGATAC CACCTCCATAC AAAATCAAAA GCTGAAGATAC CACCTCCATAC CAAAATTCCAAC GCCAAGATATAC CACCTCCATACA CAAAATCACAT GCTAACATCA CACCTCCATACA AAAATCAATAC CACCTCCATACA CAAATCACAT GCTAACATCAT CACCTCAACATCA TGTTATCACG TAACCATCACATCA	5		
(a) LENGTH: 643 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R631 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872 GTCCTATGCC TCAAACTCGT GAACACACT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTCCTA GAATTAGTTG AAATGGAAGT TCGTCGCCTT TGCTTTGAAA AGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA ACCATTCCA GAGCACAGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AAATTGATGGC TGCAGTGAC GAATACGTTC CAACTCCAGA ACGTGATACT GACAAACCAT TGCAGTGAC AGATTGATGC CAACTCCAGA ACGTGATACT GACAAACCAT TGCAGTGAC AGTTGAAGA GAACTGCTAA TCACTGGAG TGGTACTGTT AAATGTTCCG TAAATTGTTA GACTATGCTG AAGCAGGGGA TAACATTGGT GCATACAGCC GTGTCGACG AAACTGCTA AACACTGTA ACAGGTGTTG GCATAGACC GTGACAAATCA CACCTCATAC AAAATTCAAA GCGGAGATATT GGCTAAAGCT GTGGACAAATCA CACCTCATAC AAAATTCAAA GCTGAAGAT TGCATGCTAC GTGGGGTGTC CCGTGAAGACA TCCAACCTG GACAAACTTT ATGTTTTGAC AAAAGAAGAA GGTGGACGTC ACACTCCATT CTT 2) INFORMATION FOR SEQ ID NO: 873 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTGAACAAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTGTTT CTGAACAAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTGTTT CTGAACAAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTGTTT AAATGGAACT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTGAACAAAA ATGGATATGG TTGATGACGA ATGGATTGCA GAATTGTTT GAACACAAAA ATGGATATGG TTGATGACGA ATGGATTGCA GAATTGTTT GAACACAAAA ATGGATATGG TTGATGACGA ATGGATTGCA GAATTGTTT GAACGAAAAAAAATCATGG TATGCTTGAAA ATGGATTGCA GAGAGAATCT TGTTGAACAGAA ATGGATTGCA GAGAGAAAATCATGGC TTGATGACGAA ATGGATTGCA GAGAGAAATCAT TGCCCGGTT TGCTTTGAAA		2) INFORMATION FOR SEQ ID NO: 872	
(vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R631 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TGTGTGAAAA ATGGATATGG TGTGACACAA ATGGATATGG TGTGACAAA ATGGATATGG TGTGAAAAAAAAAA	10	(A) LENGTH: 643 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double	
(A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R631 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AAGAATTGCTA GAATTAGTTG AAAATGGAAGT TCGTGACCTA TTGTCTGAATA ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTGAAAA GCTCTTGAAG GAATACGTTC CAACTCCAGA AAAATCAGTG AATTGATGGC GACTATGATGAC GAATACGTTC CAACTCCAGA ACGTGATACT GACAAACCAT TCATGATGAC AGTCGAAGAC GTATTCTCAA ACGTGATACT GACAAACCAT TCATGATGCC AGTCGAAGAC GTATTCTCAA ACGTGATACT TCACTGGACG TGGTACTGTT AAATCGTTGGT ATTGCTGACG AAACACCAT AACACTGTA ACGAGGGA TAACATTGAT AAATCGTTCCG TAAAATTGTTA GACTATGCTG AACACCTGTA ACGAGGGA TAACATTGGT GAATTGCTCA GAAAAGAACACTATA AACAACTGTA ACAACTGTA AAAATGTTCCG TAAAATTGTTA GACTATAGCTG AACACCTGT GACAACTATGGT GACATGCTAC GTGGGGTTGC TCGTGAAGAC ATCCAACCTG GACAACTATT GGCCTTAAAACG GGTACAATCA CACCTCCATAC AAAATTCAAA GCTGAAGTAT GACTTTTTAACC AAAAGAAGAA GGTGGACGTC ACACTCCATT CTT 2) INFORMATION FOR SEQ ID NO: 873 40 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) CRGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACACT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAAAGAAGT TCGTGAACTAC TTGTTCTGAAT ATGACTTCCA AGAATTGCTA AAAACACACT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGAACTACT TTGTTGAAA ACGAATTCCTA AATGACATCT TCTTGAACAAA ATGCAATCT TGTTTTCAAAA AATGAATTGCA TTGTTTGAAA AATGAATTGCA TTGTTTTAAAAAAAAAA	15	(ii) MOLECULE TYPE: Genomic DNA	
GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAACAAA ATGGATATGG TTGTCTGAAC AGACTGCCA GAGCGACGAT GTTCCTGTAA TCGCCGGTTC TGTTTGAACAAA ATGAATTACCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGTTTGAACAAA ATGAATTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAC AGGACTCCTC AGACGACGAA TCGCCCAGA AAATCATGG AAATTGATGGC AGCACTGCA GAATACGTTC CAACTCCAGA ACATGGATACT GACAAACCAT TCATGATGCC AGTCGAAGAC GTATCCTCAA TCACTGGACCG TGGTACTGTT TCATGATGCC AGTCGAAGAC GTATCCTCAA TCACTGGACCG TGGTACTGTT AAATCGTTGCT ATGCTGACG AAACTCCTAA AACAACTGTA ACAGGTGTTG AAATCGTTGCTA GTGGGGTTGC TCGTGAAGAC ATCCAACGTG GACAAGTATT GCATTGCTAC GTGGGGTTC TCGTGAAGAC ATCCAACGTG GACAAGTATT GGCTAAAGCT GGTACAATCA CACCTCATAC AAAATTCAAA GCTGAAGTATT 2) INFORMATION FOR SEQ ID NO: 873 40 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAACCTCGT GAACACATCT TGTTATCACG TAACGTTGCC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAAA ATGGATATGG TTGATGACGA ACGCCCAGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCCTCTTGAAG GAGATCCTTC AAAATCCATGAAAAAAAAAA		(A) ORGANISM: Enterococcus gallinarum	
GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGACGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGCC GTGACTTGAC GAATACGTTC CAACTCCAGA ACGTGATACT GACAAACCAT TCATGATGCC AGACGACGAC GTATTCTCAA TCACTGGACG TGGTACTGTT TCATGATGCC AGTCGAAGAC GTATTCTCAA TCACTGGACG TGGTACTGTT AAATCGTTCGT AAATTGTTA GACTAAGTT CGCGTTGGTA ACGAGTAGA AATCGTTGGT ATTGCTGACG AAACTGCTAA AACAACTGTA ACAGTGTTG GCATTGCTAC GTGGGGTTGC TCGTGAAGAC ATCCAACGTG GACAAGTAT GGCTAAAGCT GGTACAATCA CACCTCATAC AAAATTCAAA GCTGAAGTATT GGCTAAAGCT GGTACAATCA CACCTCATAC AAAATTCAAA GCTGAAGTAT 2) INFORMATION FOR SEQ ID NO: 873 40 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTCGACCTA TTGTCTGAAA GCTCTTGAAAG GCGACCAT GTTCCTTCAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAATTAGTTG AAATGGAAGA AAAAATCATGG AATTGATGGC AAGACTTCCC AGGCGACCAT GTTCCTTCAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAATTAGTTG AAATGGAAGAA AAAAATCATGG AATTGATGGC AAGACTTCCC AGGCGACCAT GTTCCTTCAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG AAAAATCATC AAAAAATCATGG AATTGATGGA ACGTCTTGAAG GAATTCCTC AGACCACTT AAAAAATCATGG AATTGATGGC	20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872	
TCATGATGCC AGTCGAAGAC GTATTCTCAA TCACTGGACG TGGTACTGTT GCTACAGGCC GTGTTGAACG TGGACAAGTT CGCGTTGGTG ATGAAGTAGA AATCGTTGGT ATTGCTGACG AAACTGCTAA AACAACTGTA ACAGGTGTTG AAATGTTCCG TAAATTGTTA GACTATGCTG AAGCAGGGGA TAACATTGGT GCATTGCTAC GTGGGGTTGC TCGTGAAGAC ATCCAACCTG GACAAGTATT GGCTAAAGCT GGTACAATCA CACCTCATAC AAAAATTCAAA GCTGAAGTTT 35 ATGTTTTGAC AAAAGAAGAA GGTGGACGTC ACACTCCATT CTT 2) INFORMATION FOR SEQ ID NO: 873 40 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGGTGACTA AATGGATTGCT AAATGGAAGT TCGTGACTT TTGTTGAACAAA ATGGATTGCC AGGCGACGAT GTTCCTGAAA CTGCTTGTTT CTTGAACAAA ATGGATTAGG TTGCTTGAAAA GCCTCTTGAAG GAGATCCTC ATACGAAGAA AAAATCATGG AATTGATGGC	25	GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA CCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC	50 100 150 200 250 300
2) INFORMATION FOR SEQ ID NO: 873 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATTGGACGA TCGTTGGACTA TCGTCGACTA TCGTCTGAACAACTCT TGTTTTCAACAACTCT TGTTTTCAACAACTCT ATGGCCTAACTCT TGTTTTCAACAACTCT TGTTTCTGAAACTCTAACTCAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCAACTCTAACTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCTAACTCAACTCAACTCTAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTAACTCAACTAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTCAACTAACTCAACTCAACTCAACTCAACTCAACTCAACAA	30	TCATGATGCC AGTCGAAGAC GTATTCTCAA TCACTGGACG TGGTACTGTT GCTACAGGCC GTGTTGAACG TGGACAAGTT CGCGTTGGTG ATGAAGTAGA AATCGTTGGT ATTGCTGACG AAACTGCTAA AACAACTGTA ACAGGTGTTG AAATGTTCCG TAAATTGTTA GACTATGCTG AAGCAGGGGA TAACATTGGT GCATTGCTAC GTGGGGTTGC TCGTGAAGAC ATCCAACGTG GACAAGTATT	350 400 450 500 550 600
(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA ATGGATTGCC GTTCTTGAAG GAGTTCCTTC ATACGAAGAA AAAATCATGG AATTGATGCC	35	ATGTTTTGAC AAAAGAAGAA GGTGGACGTC ACACTCCATT CTT	643
(vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC		(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double	
(vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873 55 GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC		(ii) MOLECULE TYPE: Genomic DNA	
GTCCTATGCC TCAAACTCGT GAACACATCT TGTTATCACG TAACGTTGGC GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC	50	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus gallinarum (B) STRAIN: R691</pre>	
GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC			
60 TGCAGTTGAC GAATACGTTC CAACTCCAGA ACGTGATACT GACAAACCAT		GTACCATACA TCGTTGTTTT CTTGAACAAA ATGGATATGG TTGATGACGA AGAATTGCTA GAATTAGTTG AAATGGAAGT TCGTGACCTA TTGTCTGAAT ATGACTTCCC AGGCGACGAT GTTCCTGTAA TCGCCGGTTC TGCTTTGAAA GCTCTTGAAG GAGATCCTTC ATACGAAGAA AAAATCATGG AATTGATGGC	50 100 150 200 250 300

5	TCATGATGCC AGTCGAAGAC GTATTCTCAA TCACTGGACG TGGTACTGTT GCTACAGGCC GTGTTGAACG TGGACAAGTT CGCGTTGGTG ATGAAGTAGA AATCGTTGGT ATTGCTGACG AAACTGCTAA AACAACTGTA ACAGGTGTTG AAATGTTCCG TAAATTGTTA GACTATGCTG AAGCAGGGGA TAACATTGGT GCATTGCTAC GTGGGGTTGC TCGTGAAGAC ATCCAACGTG GACAAGTATT	400 450 500 550
-	GGCTAAAGCT GGTACAATCA CACCTCATAC AAAATTCAAA GCTGAAGTTT ATGTTTTGAC AAAAGAAGAA GGTGGACGTC ACACTCCATT C	600 641
10	2) INFORMATION FOR SEQ ID NO: 874	
15	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 681 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
20	(ii) MOLECULE TYPE: Genomic DNA	
	(vi) ORIGINAL SOURCE:(A) ORGANISM: Staphylococcus haemolyticus(B) STRAIN: LSPQ 2514	
25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874	
	ACCAGCATTA GTAGTATTCT TAAATAAAGT TGACATGGTT GACGATGAAG AATTATTAGA ATTAGTTGAA ATGGAAGTAC GTGACTTATT ATCTGAATAC GACTTCCCAG GTGACGATGT ACCTGTAATC GCTGGTTCAG CATTAAAAGC	50 100 150
30	TTTAGAAGGC GATGCTCAAT ACGAAGAAAA AATCTTAGAA TTAATGCAAG CAGTTGATGA CTACATTCCA ACTCCAGAAC GTGATTCTGA CAAACCATTC ATGATGCCAG TTGAGGACGT ATTCTCAATC ACTGGTCGTG GTACTGTTGC TACAGGCCGT GTTGAACGTG GGCAAATCAA AGTTGGTGAA GAAGTTGAAA TCATTGGTAT CCATGACACT TCTAAAACAA CTGTTACTGG TGTAGAAATG	200 250 300 350 400
35	TTCCGTAAAT TATTAGACTA CGCTGAAGCT GGTGACAACA TCGGTGCATT ATTACGTGGT GTTGCTCGTG AAGACGTACA ACGTGGTCAA GTATTAGCTG CTCCAGGTTC AATCACACCT CACACAAAAT TTAAAGCAGA CGTATACGTT TTATCTAAAG ACGAAGGTGG ACGTCACACT CCATTCTTCA CAAACTATCG TCCACAATTC TATTTCCGTA CTACTGACGT AACTGGTGTT GTTAACTTAC	450 500 550 600 650
40	CAGAAGGTAC TGAAATGGTT ATGCCTGGCG A	681
45	2) INFORMATION FOR SEQ ID NO: 875	
3.3	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 675 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double	
50	(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
55	(vi) ORIGINAL SOURCE:(A) ORGANISM: Staphylococcus epidermidis(B) STRAIN: R591	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875	
50	ATTATCACGT AACGTTGGTG TACCAGCATT AGTTGTATTC TTAAACAAAG	50

5	TTGACATGGT AGACGACGAA GAATTATTAG AATTAGTTGA AATGGAAGTT CGTGACTTAT TAAGCGAATA TGACTTCCCA GGTGACGATG TACCTGTAAT CGCTGGTTCT GCATTAAAAG CATTAGAAGG CGATGCTGAA TACGAACAAA AAATCTTAGA CTTAATGCAA GCAGTTGATG ATTACATTCC AACTCCAGAA CGTGATTCTG ACAAACCATT CATGATGCCA GTTGAGGACG TATTCTCAAT CACTGGTCGT GGTACTGTTG CTACAGGCCG TGTTGAACGT GGTCAAATCA AAGTTGGTGA AGAAGTTGAA ATCATCGGTA TGCACGAAAC TTCTAAAACA ACTGTTACTG GTGTAGAAAT GTTCCGTAAA TTATTAGACT ACGCTGAAGC TGGTGACAAC ATCGGTGCTT TATTACGTGG TGTTGCACGT GAAGACGTAC AACGTGGTCA AGTATTACGT GCTCCTGGTT CTATTACACC ACACACAAAA TTCAAAGCTG AAGTATACGT ATTATCTAAA GATGAAGGTG GACGTCACAC TAACTGGTGT TGTAAACTTA CCAGA	100 150 200 250 300 350 400 450 500 650 675
15		
	2) INFORMATION FOR SEQ ID NO: 876	
20	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 704 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
25	(ii) MOLECULE TYPE: Genomic DNA	
30	(vi) ORIGINAL SOURCE: (A) ORGANISM: Staphylococcus epidermidis (B) STRAIN: CSG 10	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876	
35	TCTTATTATC ACGTAACGTT GGTGTACCAG CATTAGTTGT ATTCTTAAAC AAAGTTGACA TGGTAGACGA CGAAGAATTA TTAGAATTAG TTGAAATGGA AGTTCGTGAC TTATTAAGCG AATATGACTT CCCAGGTGAC GATGTACCTG TAATCGCTGG TTCTGCATTA AAAGCATTAG AAGGCGATGC TGAATACGAA CAAAAAATCT TAGACTTAAT GCAAGCAGTT GATGATTACA TTCCAACTCC AGAACGTGAT TCTGACAAAC CATTCATGAT GCCAGTTGAG GACGTATTCT	50 100 150 200 250 300
40	CAATCACTGG TCGTGGTACT GTTGCTACAG GCCGTGTTGA ACGTGGTCAA ATCAAAGTTG GTGAAGAAGT TGAAATCATC GGTATGCACG AAACTTCTAA AACAACTGTT ACTGGTGTAG AAATGTTCCG TAAATTATTA GACTACGCTG AAGCTGGTGA CAACATCGGT GCTTTATTAC GTGGTGTTGC ACGTGAAGAC	350 400 450 500 550
45	AAAATTCAAA GCTGAAGTAT ACGTATTATC TAAAGATGAA GGTGGACGTC ACACTCCATT CTTCACTAAC TATCGCCCAC AATTCTATTT CCGTACTACT GACGTAACTG GTGTTGTAAA CTTACCAGAA GGTACAGAAA TGGTTATGCC TGGC	600 650 700 704
50	2) INFORMATION FOR SEQ ID NO: 877	
55	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 770 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	

(A) (B) (C) (D) TOPOLOGY: Linear

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(ii) MOLECULE TYPE: Genomic DNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Staphylococcus epidermidis
- (B) STRAIN: ATCC 35984
- 5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877

	TCTTAGTTGT	ATCTGCTGCT	GACGGTCCAA	TGCCACAAAC	TCGTGAACAC	50
	ATCTTATTAT	CACGTAACGT	TGGTGTACCA	GCATTAGTTG	TATTCTTAAA	100
	CAAAGTTGAC	ATGGTAGACG	ACGAAGAATT	ATTAGAATTA	GTTGAAATGG	150
10	AAGTTCGTGA	CTTATTAAGC	GAATATGACT	TCCCAGGTGA	CGATGTACCT	200
	GTAATCGCTG	GTTCTGCATT	AAAAGCATTA	GAAGGCGATG	CTGAATACGA	250
	ACAAAAAATC	TTAGACTTAA	TGCAAGCAGT	TGATGATTAC	ATTCCAACTC	300
	CAGAACGTGA	TTCTGACAAA	CCATTCATGA	TGCCAGTTGA	GGACGTATTC	350
	TCAATCACTG	GTCGTGGTAC	TGTTGCTACA	GGCCGTGTTG	AACGTGGTCA	400
15	AATCAAAGTT	GGTGAAGAAG	TTGAAATCAT	CGGTATGCAC	GAAACTTCTA	450
	AAACAACTGT	TACTGGTGTA	GAAATGTTCC	GTAAATTATT	AGACTACGCT	500
	GAAGCTGGTG	ACAACATCGG	TGCTTTATTA	CGTGGTGTTG	CACGTGAAGA	550
	CGTACAACGT	GGTCAAGTAT	TAGCTGCTCC	TGGTTCTATT	ACACCACACA	600
	CAAAATTCAA	AGCTGAAGTA	TACGTATTAT	CTAAAGATGA	AGGTGGACGT	650
20	CACACTCCAT	TCTTCACTAA	CTATCGCCCA	CAATTCTATT	TCCGTACTAC	700
	TGACGTAACT	GGTGTTGTAA	ACTTACCAGA	AGGTACAGAA	ATGGTTATGC	750
	CTGGCGACAA	CGTTGAAATG				770

25

2) INFORMATION FOR SEQ ID NO: 878

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 716 bases
- 30 (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
 - (ii) MOLECULE TYPE: Genomic DNA

35

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Staphylococcus epidermidis
 - (B) STRAIN: ATCC 35983
- 40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878

	TTGTATTCTT	AAACAAAGTT	GACATGGTAG	ACGACGAAGA	ATTATTAGAA	50
	TTAGTTGAAA	TGGAAGTTCG	TGACTTATTA	AGCGAATATG	ACTTCCCAGG	100
	TGACGATGTA	CCTGTAATCG	CTGGTTCTGC	ATTAAAAGCA	TTAGAAGGCG	150
45	ATGCTGAATA	CGAACAAAAA	ATCTTAGACT	TAATGCAAGC	AGTTGATGAT	200
	TACATTCCAA	CTCCAGAACG	TGATTCTGAC	AAACCATTCA	TGATGCCAGT	250
	TGAGGACGTA	TTCTCAATCA	CTGGTCGTGG	TACTGTTGCT	ACAGGCCGTG	300
	TTGAACGTGG	TCAAATCAAA	GTTGGTGAAG	AAGTTGAAAT	CATCGGTATG	350
	CACGAAACTT	CTAAAACAAC	TGTTACTGGT	GTAGAAATGT	TCCGTAAATT	400
50	ATTAGACTAC	GCTGAAGCTG	GTGACAACAT	CGGTGCTTTA	TTACGTGGTG	450
	TTGCACGTGA	AGACGTACAA	CGTGGTCAAG	TATTAGCTGC	TCCTGGTTCT	500
	ATTACACCAC	ACACAAAATT	CAAAGCTGAA	GTATACGTAT	TATCTAAAGA	550
	TGAAGGTGGA	CGTCACACTC	CATTCTTCAC	TAACTATCGC	CCACAATTCT	. 600
	ATTTCCGTAC	TACTGACGTA	ACTGGTGTTG	TAAACTTACC	AGAAGGTACA	650
55	GAAATGGTTA	TGCCTGGCGA	CAACGTTGAA	ATGACAGTTG	AATTAATCGC	700
	TCCAATCGCT	ATCGAA				716

60 2) INFORMATION FOR SEQ ID NO: 879

5	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 640 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
	(ii) MOLECULE TYPE: Genomic DNA	
10	(vi) ORIGINAL SOURCE:(A) ORGANISM: Enterococcus gallinarum(B) STRAIN: R764	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879	
15	GCGTCCTATG CCTCAAACTC GTGAACACAT CTTGTTATTAT GGTTGATGAC GCGTACCATA CATCGTTGTT TTCTTGAACA AAATGGATAT GGTTGATGAC GAAATGGAATTAGT TGAAATGGAA GTTCGTGACC TATTGTCTGA	50 100 150
20	ATATGACTTC CCAGGCGACG ATGTTCCTGT AATCGCCGGT TCTGCTTTGA AAGCTCTTGA AGGAGATCCT TCATACGAAG AAAAAATCAT GGAATTGATG GCTGCAGTTG ACGAATACGT TCCAACTCCA GAACGTGATA CTGACAAACC GCTGCAGTTG ACGACTCGAAG ACGTATTCTC AATCACTGGA CGTGGTACTG	200 250 300 350 400
25	GAAATCGTTG GTATTGCTGA CGAAACTGCT AAAACAACTG TAACAGGIGI TGAAATGTTC CGTAAATTGT TAGACTATGC TGAAGCAGGG GATAACATTG CTGCATTGCT ACGTGGGGTT GCTCGTGAAG ACATCCAACG TGGACAAGTA	450 500 550 600 640
30		
	2) INFORMATION FOR SEQ ID NO: 880	
35	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 831 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
40	(ii) MOLECULE TYPE: Genomic DNA	
	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Pseudomonas aeruginosa (B) STRAIN: PAO-1</pre>	
45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880	
50	CGGCGCGATC CTGGTTTGCT CGGCTGCCGA CGGCCCCATG CCGCAGACCC GCGAGCACAT CCTGCTGTCC CGCCAGGTAG GCGTTCCCTA CATCGTCGTG TTCCTGAACA AGGCCGACAT GGTCGACGAC GCCGAGCTGC TGGAACTGGT CGAGATGGAA GTTCGCGATC TGCTGAACAC CTACGACTTC CCGGGCGACG	50 100 150 200
	ACACTCCGAT CATCATCGGT TCCGCGCTGA TGGCGCTGGA AGGCAAGGAT GACAACGGCA TCGGCGTAAG CGCCGTGCAG AAGCTGGTAG AGACCCTGGA CTCCTACATT CCGGAGCCGG TTCGTGCCAT CGACCAGCCG TTCCTGATGC CGATCGAAGA CGTGTTCTCG ATCTCCGGCC GCGGTACCGT GGTAACCGGT	250 300 350 400
55	CGATCGAAGA CGTGTTCTCG ATCTCCGGCC GCGGTACCGT GGAACAGTCGTCGG CGTGTAGAGC GCGGCATCAT CAAGGTCCAG GAAGAAGTGG AAATCGTCGG CATCAAGGCG ACCACCAAGA CTACCTGCAC CGGCGTTGAA ATGTTCCGCA AGCTGCTCGA CGAAGGTCGT GCTGGTGAGA ACGTTGGTAT CCTGCTGCGT GGCACCAAGC GTGAAGACGT AGAGCGTGGC CAAGCCCGGG	450 500 550 600
60	CACCATCAAG CCGCACACCA AGTTCGAGTG CGAAGTGTAC GTGCTGTCCA	650

_	AGGAAGAAGG TGGTCGTCAC ACCCCGTTCT TCAAGGGCTA CCGTCCGCAG TTCTACTTCC GTACCACCGA YGTGACCGGT AACTGCGAAC TGCCGGAAGG CGTAGAGATG GTAATGCCGG GCGACAACAT CAAGATGGTT GTCACCCTGA TCGCTCCGAT CGCCATGGAA GATGGCCTGC G	700 750 800 831
5	•	
	2) INFORMATION FOR SEQ ID NO: 881	
10	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 642 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double(D) TOPOLOGY: Linear	
15	(ii) MOLECULE TYPE: Genomic DNA	
20	(vi) ORIGINAL SOURCE:(A) ORGANISM: Enterococcus casseliflavus(B) STRAIN: R421	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881	
25	CCTATGCCTC AAACACGTGA ACACATCTTG TTATCACGTA ACGTTGGTGT ACCATACATC GTTGTTTTCT TAAACAAAAT GGATATGGTT GATGACGAAG AATTACTAGA ATTAGTTGAA ATGGAAGTTC GTGACTTATT GTCAGAATAT GACTTCCCAG GCGACGATGT TCCTGTAATC GCTGGTTCTG CTTTGAAAGC TCTTGAAGGC GATGCTTCAT ACGAAGAAAA AATCATGGAA TTAATGGCTG	50 100 150 200 250
30	CAGTTGACGA ATACGTTCCA ACTCCAGAAC GTGACACTGA CAAACCATTC ATGATGCCAG TCGAAGACGT ATTCTCAATC ACTGGACGTG GTACTGTTGC TACAGGCCGT GTTGAACGTG GACAAGTTCG CGTTGGTGAC GAAGTTGAAA TCGTTGGTAT TGCTGAAGAA ACTGCTAAAA CAACTGTAAC TGGTGTTGAA ATGTTCCGTA AATTGTTAGA CTATGCTGAA GCAGGGGATA ACATTGGTGC	300 350 400 450 500
35	ATTGCTACGT GGTGTTGCTC GTGAAGACAT CCAACGTGGA CAAGTATTGG CTAAAGCTGG TACAATCACA CCTCATACAA AATTTAAAGC TGAAGTTTAC GTTTTAACAA AAGAAGAAGG TGGACGTCAC ACACCATTCT TC	550 600 642
40	2) INFORMATION FOR SEQ ID NO: 882	
45	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 636 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
	(ii) MOLECULE TYPE: Genomic DNA	
50	(vi) ORIGINAL SOURCE:(A) ORGANISM: Enterococcus casseliflavus(B) STRAIN: R775	
55	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882	
.J.J	CCTATGCCTC AAACACGTGA ACACATCTTG TTATCACGTA ACGTTGGTGT ACCATACATC GTTGTTTTCT TAAACAAAAT GGATATGGTT GATGACGAAG AATTACTAGA ATTAGTTGAA ATGGAAGTTC GTGACTTATT GTCAGAATAT GACTTCCCAG GCGACGATGT TCCTGTAATC GCTGGTTCTG CTTTGAAAGC	50 100 150 200
60	TCTTGAAGGC GATGCTTCAT ACGAAGAAAA AATCATGGAA TTAATGGCTG	250

5	CAGTTGACGA ATACGTTCCA ACTCCAGAAC GTGACACTGA CAAACCATTC ATGATGCCAG TCGAAGACGT ATTCTCAATC ACTGGACGTG GTACTGTTGC TACAGGCCGT GTTGAACGTG GACAAGTTCG CGTTGGTGAC GAAGTTGAAA ACGTTCGTAT TGCTGAAGAA ACTGCTAAAA CAACTGTAAC TGGTGTTGAA ATTGCTACGT AATTGTTAGA CTATGCTGAA GCAGGGGATA ACATTGGTGC CTAAAGCTGG GGTGTTGCTC GTGAAGACAT CCAACGTGGA CAAGTATTGG CTAAAGCTGG TACAATCACA CCTCATACAA AATTTAAAGC TGAAGTTTAC GTTTTAACAA AAGAAGAAGG TGGACGTCAT ACACCA	300 350 400 450 500 550 600 636
10		
	2) INFORMATION FOR SEQ ID NO: 883	
15	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 641 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
20	(ii) MOLECULE TYPE: Genomic DNA	
	(vi) ORIGINAL SOURCE:(A) ORGANISM: Enterococcus faecalis(B) STRAIN: R422	
25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883	
30	GGTCCTATGC CTCAAACACG TGAACATATC TTATTATCAC GTAACGTTGG TGTACCATAC ATCGTTGTAT TCTTAAACAA AATGGATATG GTTGATGACG AAGAATTATT AGAATTAGTA GAAATGGAAG TTCGTGACTT ATTATCAGAA TACGATTTCC CAGGCGATGA TGTTCCAGTT ATCGCAGGTT CTGCTTTGAA AGCTTTAGAA GGCGACGAGT CTTATGAAGA AAAAATCTTA GAATTAATGG CTGCAGTTGA CGAATATATC CCAACTCCAG AACGTGATAC TGACAAACCA	50 100 150 200 250 300
35	TTCATGATGC CAGTCGAAGA CGTATTCTCA ATCACTGGAC GTGGTACTGT TGCTACAGGC CGTGTTGAAC GTGGTGAAGT TCGCGTTGGT GACGAAGTTG AAATCGTTGG TATTAAAGAC GAAACATCTA AAACAACTGT TACAGGTGTT GAAATGTTCC GTAAATTATT AGACTACGCT GAAGCAGGCG ACAACATCGG TCCTTTATTA CGTGGTGTAG CACGTGAAGA TATCGAACGT GGACAAGTAT	350 400 450 500 550 600
40	TAGCTAAACC AGCTACAATC ACTCCACACA CAAAATTCAA AGCTGAAGTA TACGTATTAT CAAAAGAAGA AGGCGGACGT CACACTCCAT T	641
45	2) INFORMATION FOR SEQ ID NO: 884 (i) SEQUENCE CHARACTERISTICS:	
50	(A) LENGTH: 640 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
55	(vi) ORIGINAL SOURCE:(A) ORGANISM: Enterococcus faecalis(B) STRAIN: R575	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884	
60	TATGCCTCAA ACACGTGAAC ATATCTTATT ATCACGTAAC GTTGGTGTAC	50

5	CATACATCGT TGTATTCTTA AACAAAATGG ATATGGTTGA TGACGAAGAA TTATTAGAAT TAGTAGAAAT GGAAGTTCGT GACTTATTAT CAGAATACGA TTTCCCAGGC GATGATGTTC CAGTTATCGC AGGTTCTGCT TTGAAAGCTT TAGAAGGCGA CGAGTCTTAT GAAGAAAAAA TCTTAGAATT AATGGCTGCA GTTGACGAAT ATATCCCAAC TCCAGAACGT GATACTGACA AACCATTCAT GATGCCAGTC GAAGACGTAT TCTCAATCAC TGGACGTGGT ACTGTTGCTA CAGGCCGTGT TGAACGTGGT GAAGTTCGCG TTGGTGACGA AGTTGAAATC GTTGGTATTA AAGACGAAAC ATCTAAAACA ACTGTTACAG GTGTTGAAAT GTTCCGTAAA TTATTAGACT ACGCTGAAGC AGGCGACAAC ATCGGTGCTT TATTACGTGG TGTTGCACGT GAAGATATCG AACGTGGACA AGTATTAGCT AAACCAGCTA CAATCACTCC ACACACAAAA TTCAAAAGCTG AAGTATACGT ATTATCAAAA GAAGAAGGCG GACGTCACAC TCCATTCTTC	100 150 200 250 300 350 400 450 500 550 640
15	2) INFORMATION FOR SEQ ID NO: 885	
20	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 632 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
25	 (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus faecium (B) STRAIN: R492 	
30	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885	
35	TGCCTCAAAC TCGTGAACAC ATCCTATTGT CTCGTCAAGT TGGTGTTCCT TACATCGTTG TATTCTTGAA CAAAGTAGAC ATGGTTGATG ACGAAGAATT ACTAGAATTA GTTGAAATGG AAGTTCGTGA CCTATTAACA GAATACGAAT TCCCTGGTGA CGATGTTCCT GTAGTTGCTG GATCAGCTTT GAAAGCTCTA GAAGGCGACG CTTCATACGA AGAAAAAATT CTTGAATTAA TGGCTGCAGT TGACGAATAC ATCCCAACTC CAGAACGTGA CAACGACAAA CCATTCATGA TGCCAGTTGA AGACGTGTTC TCAATTACTG GACGTGGTAC TGTTGCTACA GGTCGTGTTG AACGTGGACA AGTTCGCGTT GGTGACGAAG TTGAAGTTGT TGGTATTGCT GAAGAAACTT CAAAAACAAC AGTTACTGGT GTTGAAATGT TCCGTAAATT GTTAGACTAC GCTGAAGCTG GAGACAACAT TGGTGCTTTA CTACGTGGTG TTGCACGTGA AGACATCCAA CGTGGACAAG TTTTAGCTAA	50 100 150 200 250 300 350 400 450 500
45	ACCAGGTACA ATCACACCTC ATACAAAATT CTCTGCAGAA GTATACGTGT TGACAAAAGA AGAAGGTGGA CGTCATACTC CA	600 632
45		
	2) INFORMATION FOR SEQ ID NO: 886	
50	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 640 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
55	(ii) MOLECULE TYPE: Genomic DNA	
	(vi) ORIGINAL SOURCE:	
60	(A) ORGANISM: Enterococcus faecium (B) STRAIN: R576	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886

	CGGCCCAATG	CCTCAAACTC	GTGAACACAT	CCTATTGTCT	CGTCAAGTTG	50
5	GTGTTCCTTA	CATCGTTGTA	TTCTTGAACA	AAGTAGACAT	GGTTGATGAC	100
⊃		TAGAATTAGT				150
	ATACGAATTC	CCTGGTGACG				200
	ATACGAATIC	AGGCGACGCT	TCATACGAAG	AAAAAATTCT	TGAATTAATG	250
		ACGAATACAT	CCCAACTCCA	GAACGTGACA	ACGACAAACC	300
_	0010001		A CGTGTTCTC	AATTACTGGA	CGTGGTACTG	350
10	ATTCATGATG	TCGTGTTGAA				400
			AGAAACTTCA	1100001100	TTACTGGTGT	450
	GAAGTTGTTG	GTATTGCTGA	MOMAMCIICA	TCAACCTCCA		500
	TGAAATGTTC	CGTAAATTGT	TAGACTACGC	A CATCCA ACC		550
	GTGCTTTACT	ACGTGGTGTT	GCACGIGAAG	ACAICCAACG		600
15	TTAGCTAAAC	CAGGTACAAT	CACACCTCAT	ACAAAATICI	CIGCAGAAGI	640
	ATACGTGTTG	ACAAAAGAAG	AAGGTGGACG	TCATACTCCA		040

20 2) INFORMATION FOR SEQ ID NO: 887

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 806 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Genomic DNA
- 30 (vi) ORIGINAL SOURCE:

25

55

60

- (A) ORGANISM: Zoogloea ramigera
- (B) STRAIN: ATCC 25935
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887

35	ATCCTGGTTT	GCTCCGCAGC	TGACGGCCCA	ATGCCACAGA	CCCGCGAGCA	50
	CATCCTGCTG	GCCCGCCAAG	TTGGCGTTCC	ATACATCATC	GTGTTCCTGA	100
	ACAAGTGCGA	CCTGGTTGAC	GACGCAGAAC	TGCTGGAACT	GGTCGAAATG	150
	GAAGTGCGTG	AATTGCTGTC	GAAATACGAG	TTCCCAGGCG	ACGACGTACC	200
40	AATCATCAAG	GGTTCGGCAC	GTATGGCGCT	GGAAGGCAAA	GAAGGCGAGA	250
40	TGGGCGTTGA	CGCCATCATG	CGTCTGGCCG	ATGCACTGGA	CAGCTACATC	300
	CCTACGCCAG	AGCGCGCAGT	CGATGGCGCC	TTCCTGATGC	CAGTGGAAGA	350
	CGTGTTCTCG	ATCTCGGGTC	GCGGTACCGT	TGTGACCGGT	CGTATCGAGC	400
	GCGGCGTGAT	CAAGGTCGGC	GAAGAGATCG	AAATCGTCGG	CATTATCGAC	450
45	ACCGTCAAAA	CCACTTGCAC	CGGCGTGGAA	ATGTTCCGCA	AGCTGCTGGA	500
3.0	CCAGGGTCAA	GCCGGCGACA	ACGTTGGTCT	GCTGCTGCGC	GGCACCAAGC	550
	GTGAAGACGT	ACAGCGTGGT	CAGGTTCTGG	CCAAGCCAGC	GTCGATCAAG	600
	CCGCACAACC	ACTTCACCGG	CGAGATCTAC	GTTCTGTCGA	AAGATGAAGG	650
	CGGCCGTCAC	ACCCCGTTCT	TCAACAACTA	TCGTCCACAG	TTCTACTTCC	700
50	GTACGACTGA	CGTGACCGGT	TCGATCGAAC	TGCCAGCAGA	CAAAGAAATG	750
50	GTCATGCCAG	GCGACAACGT	GTCGATCACC	GTCAAGCTGA	TCAACCCGAT	800
	CGCGAT					806

2) INFORMATION FOR SEQ ID NO: 888

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 634 bases
 - (B) TYPE: Nucleic acid

	(C) STRANDEDNESS: Double(D) TOPOLOGY: Linear	
5	(ii) MOLECULE TYPE: Genomic DNA	
3	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Enterococcus fa (B) STRAIN: R503</pre>	aecalis
10	(xi) SEQUENCE DESCRIPTION: SEQ ID N	NO: 888
15	TATGCCTCAA ACACGTGAAC ATATCTTATT ATCACATCGT TGTATTCTTA AACAAAATGG ATATTTATTAGAAT TAGTAGAAAT GGAAGTTCGT GACTTTCCCAGGC GATGATGTTC CAGTTATCGC AGGTAGAAGGCGA CGAGTCTTAT GAAGAAAAAA TCTTGATGACGAAT ATATCCCAAC TCCAGAACGT GATAGATGCCAGTC GAAGACGTAT TCTCAATCAC TGGA	TGGTTGA TGACGAAGAA 10 TTATTAT CAGAATACGA 15 TTCTGCT TTGAAAGCTT 20 TAGAATT AATGGCTGCA 25 ACTGACA AACCATTCAT 30 ACGTGGT ACTGTTGCTA 35
20	CAGGCCGTGT TGAACGTGGT GAAGTTCGCG TTGG GTTGGTATTA AAGACGAAAC ATCTAAAACA ACTG GTTCCGTAAA TTATTAGACT ACGCTGAAGC AGGG TATTACGTGG TGTAGCACGT GAAGATATCG AACC AAACCAGCTA CAATCACTCC ACACACAAAA TTCA	GTTACAG GTGTTGAAAT 45 CGACAAC ATCGGTGCTT 50 GTGGACA AGTATTAGCT 55 AAAGCTG AAGTATACGT 60
25	ATTATCAAAA GAAGAAGGCG GACGTCACAC TCCA	A 63
	2) INFORMATION FOR SEQ ID NO: 889	
30	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 493 bases (B) TYPE: Nucleic acid (C) STREEDNESS: Double	
35	(D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA	
40	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Aspergillus fun (B) STRAIN: ATCC 14110</pre>	migatus
	(xi) SEQUENCE DESCRIPTION: SEQ ID N	NO: 889
45	TGTCTTCATC CAGGAATTGA TTGTGAGTCG TTCC TTCGCTCGAT CTTTTCACTA ACGCAAACCA TGTA GCCCACGGTG GTTACTCCGT CTTCACTGGT GTTC GGGTAACGAT CTGTACCACG AAATGCAGGA GACT AGGGTGAATC CAAGGTCGCA CTGGTGTTCG GACA	AGAACAA CATTGCCAAG 10 GGTGAGC GTACTCGTGA 15 TGGTGTC ATTCAGCTCG 20 AGATGAA CGAGCCCCCC 25
50	GGTGCCCGTG CCCGTGTCGC CCTTACCGGT CTGACCGACGACGACGACGACGACGACGACGACCACCACCAC	CATTGAC AACATTTTCC 35 TTCTCGG TCGTATCCCC 40 GACATGG GTGGTATGCA 45
55		
60	(i) SEQUENCE CHARACTERISTICS: 890(A) LENGTH: 466 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double	

	(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
5	(vi) ORIGINAL SOURCE:(A) ORGANISM: Penicillium marneffei(B) STRAIN: ATCC 64101	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890	
10	TTGATTGTAC GTCTTTACCT TTCTGCCTGA CTGTTTACGA CAACTAACGA AAGCGTAGAA CAACATTGCC AAGGCTCACG GTGGTTACTC TGTCTTCACT	50 100 150
15	GGTGTCGGTG AACGTACTCG TGAGGGTAAC GATTTGTACC ACGAAATGCA GGAAACTGGT GTCATTCAGC TCGAGGGTGA ATCCAAGGTC GCCCTCGTGT TCGGTCAGAT GAACGAGCCC CCCGGTGCCC GTGCCCGTGT CGCTCTTACT GGTTTGACCA TTGCCGAGTA CTTCCGTGAC GAGGAAGGTC AGGACGTGCT TCTCTTCATT GACAACATTT TCCGTTTCAC TCAGGCCGGT TCTGAGGTGT CTGCCCTTCT GGGTCGTATC CCCTCTGCCG TCGGTTACCA GCCCACCCTT	200 250 300 350 400
20	GCCGTCGACA TGGGTATCAT GCAGGAGCGT ATTACCACCA CCACCAAGGG TTCCATCACC TCCGTC	450 466
25	2) INFORMATION FOR SEQ ID NO: 891	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 478 bases (B) TYPE: Nucleic acid	
30	(C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	•
35	(vi) ORIGINAL SOURCE:(A) ORGANISM: Paecilomyces lilacinus(B) STRAIN: ATCC 42570	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891	
40	AGGAGCTGAT CAACAACATC GCCAAGGCTC ACGGTGGTTA CTCCGTCTTC ACTGGTGTCG GTGAGCGTAC CCGTGAGGGT AACGATCTGT ACCACGAAAT GCAGGAGACC TCGGTCATTC AGCTCGAGGG CGAGTCTAAG GTGGCCCTGG	50 100 150 200
45	TCTTTGGTCA GATGAACGAG CCCCCGGGTG CTCGTGCCCG TGTCGCTCTT ACTGGTCTTA CCGTCGCCGA GTACTTCCGT GACCAGGAGG GTCAGGATGG TTAGTTCTCG TCCACTCATG CCGAAACATG TGCGTGTTCC GAGGCTAATC AACGTGCCAG TGCTGCTTTT CATCGACAAC ATTTTCCGAT TCACACAGGC CGGTTCCGAG GTGTCTGCCC TGCTGGGTCG TATCCCCTCT GCCGTCGGTT ACCAGCCCAC CCTCGCCGTC GACATGGGTG GCATGCAGGA GCGTATCACC	250 300 350 400 450
	ACCAGCIACA ACGCCTCTAT CACCTCCG	478
50	ACCACCAAGA AGGGCTCTAT CACCTCCG	
50	ACCACCAGA AGGGCTCTAT CACCTCCG 2) INFORMATION FOR SEQ ID NO: 892	
50 55	ACCACCAAGA AGGGCTCTAT CACCTCCG	

	(ii) MOL	ECULE TYPE:	Genomic DN	A.		
5	(A)	GINAL SOURCE ORGANISM: STRAIN: AT	Penicilliu	m marneffei		
	(xi) SEQU	UENCE DESCRI	IPTION: SEQ	ID NO: 892		
10	TACGACAACT TACTCTGTCT GTACCACGAA	AACGAAAGCG TCACTGGTGT ATGCAGGAAA	TAGAACAACA CGGTGAACGT CTGGTGTCAT	TTGCCAAGGC ACTCGTGAGG TCAGCTCGAG	GTAACGATTT GGTGAATCCA	100 150 200
15	CGTGTCGCTC AGGTCAGGAC CCGGTTCTGA TACCAGCCCA	TTACTGGTTT GTGCTTCTCT GGTGTCTGCC	GACCATTGCC TCATTGACAA CTTCTGGGTC CGACATGGGT	GAGTACTTCC CATTTTCCGT GTATCCCCTC ATCATGCAGG	TGCCCGTGCC GTGACGAGGA TTCACTCAGG TGCCGTCGGT AGCGTATTAC	300 350 400
20		·				
	2) INFORMAT	ION FOR SEQ	ID NO: 893			
25	(A) (B) (C)	UENCE CHARAC LENGTH: 12 TYPE: Nucl STRANDEDNE TOPOLOGY:	208 bases leic acid ESS: Double			
30	(ii) MOLI	ECULE TYPE:	Genomic DNA	A		
35	(A)	GINAL SOURCE ORGANISM: STRAIN: AI	Sporothrix	schenckii		
35	(xi) SEQU	UENCE DESCRI	IPTION: SEQ	ID NO: 893		
40	CGTCGGCCCC TCGACGAGCG GAGGCTCCCG TGGTATCAAG	GGTACCCTCG CGGTCCCATC AGTTCGTTGA GTCGTCGATC	GTCGCATCAT AAGACCGACA CCAGTCGACC TGCTTGCTCC	GAACGTCACC AGTTCCGTCC ACCGCTGAGG CTACGCCCGT	GGTGGTAAGA	100
45	CTCATCAACA TGTCGGCGAG AGACCTCTGT GGTCAGATGA	TGGCGGTGCC ACATCGCCAA CGTACCCGTG CATTCAGCTT ACGAGCCCCC	GGCCCACGGT AGGGTAACGA GACGGTGACT TGGTGCTCGT	GGTTACTCCG TCTGTACCAC CCAAGGTCGC GCCCGTGTCG	TCTTCACCGG GAAATGCAGG CCTGGTGTTC CCTTGACCGG	300 350 400 450 500
50	TTTGAATTAT GTCAGTGCTT CTGAGGTGTC CCCACGCTCG	GCTGAGTACT TTCCTTGTCG CTCTTCATCG TGCCCTTCTG CCGTGGACAT	TACAGTTCCA ACAACATTTT GGTCGTATTC GGGTCTGATG	AATCGAAGAA CCGCTTCACC CCTCCGCTGT CAGGAGCGTA	TTACTAACTT CAGGCCGGTT CGGTTACCAG TTACCACCAC	550 600 650 700 750
55	ATCTGACGGA ACTGTGCTGT CCCCCTCGAC ACCACTACGA TCGCTGCAGG	TCAATTACCT TCCCGCCCCC CCCGAGGTAT TCCAAGTCGC GACCGCCACT ACATCATCGC ACAGTCGAGC	GCCACCACCT CTCTGAGCTG GTATGCTGGA CGCGTCCAGC CATTCTGGGT	TCGCCCATCT GGTATCTACC CCCCCGTATT AGATCCTCCA ATGGACGAGC	GGACGCCACC CCGCTGTCGA GTCGGTGACG AGAGTACAAG TGTCTGAGGC	800 850 900 950 1000 1050

AGCCGTTCAC GGTCGCGCAG GTCTTCACTG GTATCGAAGG CCAGCTGGTC

	GATCTGAAGG ACACTATCGC TTCGTTCAAG GCTATCCTGA GCGGTGAGGG TGACAGCC	1200 1208
5	2) INFORMATION FOR SEQ ID NO: 894	
10	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 534 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
1 F	(ii) MOLECULE TYPE: Genomic DNA	
15	(vi) ORIGINAL SOURCE:(A) ORGANISM: Malbranchea filamentosa(B) STRAIN: ATCC 48174	
20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894	
25	TTCAGGAACT TATTGTAAGC CGCCCTCTTT ATGCATTGAG GGTGAATAAG AAGGCTGACA GGTAATAGAA CAACATTGCC AAGGCTCACG GTGGTTACTC CGTGTTCACT GGTGTCGGTG AGCGTACCCG TGAAGGAAAC GATCTGTACC ATGAAATGCA GGAAACCCGC GTCATCCAGC TTGATGCGAG GTCTAAGGTC GCCCTTGTGT TCGGTCAGAT GAACGAGCCC CCTGGAGCCC GTGCCCGTGT CGCTCTTACT GGTCTTACCG TTGCCGAATA CTTCCGTGAC GAGGAGGCC AAGATGGTAC GCCTTTTTAC TCTTCTTATT CTTCGGTCG GACTACAGAA	50 100 150 200 250 300 350 400
30 ়	CTAACCTGCT CCAGTGCTTC TCTTCATTGA TAACATTTTC CGTTTCACAC AAGCCGGTTC TGAGGTGTCT GCCTTGCTTG GACGTATTCC CTCTGCCGTC GGTTACCAGC CCACTCTCGC CGTCGACATG GGTGGTATGC AGGAACGTAT CACAACCACC AACAAGGGTT CCATTACTTC CGTG	45 50 53
35	2) INFORMATION FOR SEQ ID NO: 895	
40	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 448 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
45	(ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE:	
	(A) ORGANISM: Paecilomyces lilacinus (B) STRAIN: ATCC 60735	
50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895	
55	ACTTCCGTGA CCAGGAGGGT CAGGATGGTT AGTTCTCGTC CACTCATGCC GAAACATGTG CGTGTTCCGA GGCTAATCAA CGTGCCAGTG CTGCTTTTCA TCGACAACAT TTTCCGATTC ACCCAGGCCG GTTCCGAGGT GTCTGCCCTG	150 200 250 300 350
	CTGGGTCGTA TCCCCTCTGC CGTCGGTTAC CAGCCCACCC TCGCCGTCGA	448

_	2) INFORMATION FOR SEQ ID NO: 896	
5	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 483 bases (B) TYPE: Nucleic acid	
10	(C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
15	(vi) ORIGINAL SOURCE:(A) ORGANISM: Aspergillus niger(B) STRAIN: ATCC 9508	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896	
20	ATTCAGGAGC TGATTGTAAG TTGCCAATCC ATGAACTGGA GATTTGGTGT GACCCATAGA ACTAACAAAT TATTTAGAAC AACATCGCCA AGGCTCACGG TGGTTACTCC GTCTTCTGTG GTGTCGGTGA GCGTACTCGT GAGGGTAACG ATCTGTACCA CGAAATGCAG GAGACTGGTG TCATCCAGCT CGAGGGTGAC TCCAAGGTCG CTCTGGTCTT CGGTCAGATG AACGAGCCCC CGGGTGCCCG	50 100 150 200 250
25	TGCCCGTGTC GCCCTTACCG GTCTGACCAT TGCCGAGTAC TTCCGTGACG AGGAGGGTCA GGACGTGCTG CTCTTCATTG ACAACATTTT CCGTTTCACC CAGGCCGGTT CTGAGGTGTC TGCCCTTCTG GGTCGTATCC CCTCTGCCGT CGGTTACCAG CCCACTCTGG CCGTCGACAT GGGTGGTATG CAGGAGCGTA TTACCACCAC CACCAAGGGT TCCATTACCT CCG	300 350 400 450 483
30	/ Company of the comp	
	2) INFORMATION FOR SEQ ID NO: 897	
35	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1124 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double	
40	(D) TOPOLOGY: Linear	
40	(ii) MOLECULE TYPE: Genomic DNA	
	(vi) ORIGINAL SOURCE: (A) ORGANISM: Aspergillus fumigatus	
45	(B) STRAIN: ATCC 14110	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897	
50	AAGCTCAAGT CCGAGCGTGA GCGTGGTATC ACCATCGACA TTGCCCTCTG GAAGTTCCAG ACTCCCAAGT ATGAGGTCAC TGTCATCGGT AAGCTCGACT CGCCCCGATA TGTTTTGGTG CTGTAGCTAA CACGATCTGA AGATGCCCCC GGTCACCGTG ACTTCATCAA GAACATGATC ACTGGTACCT CCCAGGCTGA CTGCGCTATC CTCATCATTG CCTCCGGTAC TGGTGAGTTC GAGGCTGGTA	50 100 150 200 250
55	TCTCCAAGGA TGGCCAGACC CGTGAGCACG CTCTGCTGGC TTTCACCCTC GGTGTCAAGC AGCTCATCGT CGCCCTCAAC AAGATGGACA CCTGCAAGTG GTCCGAGGAT CGTTACAACG AAATTGTCAA GGAAACCTCC AACTTCATCA AGAAGGTCGG CTACAACCCC AAGGCCGTTC CCTTCGTCCC CATCTCTGGC TTCAACGGTG ACAACATGCT TGAGCCCTCC TCCAACTGCC CCTGGTACAA	300 350 400 450 500
60	GGGATGGGAG AAGGAGACCA AGGCCGGCAA GGTCACTGGT AAGACCCTCA TCGAGGCCAT CGACGCCATT GAGCCCCCTG TCCGTCCCTY CAACAAGCCC	550 600

	CTCCGTCTTC	CCCTCCAGGA	TGTCTACAAG	ATCTCTGGTA	TCGGAACGGT	650
	COMOMOCOC	CCTCTCGAGA	CCGGTATCAT	CAAGCCCGGC	ATGGTCGTCA	700
	CCTTCGCCCC	CCCCAACGTC	ACCACTGAAG	TCAAGTCCGT	CGAGATGCAC	750
	CACCAGCAGC	TCCACCACGG	TGTCCCCGGT	GACAACGTCG	GTTTCAACGT	800
_	CACCAGCAGC	TCCAGGAGGC	AAGTCCGCCG	TGGTAACGTC	TGCGGTGACT	850
5	CCAAGAACGIT	TOCGTCAAGG	CCTCCTCCCT	CCTTCAACGC	CCAGGTCATC	900
	CCAAGAACGA	ACCCCGGTCA	CCTCCCCCCT	GGTTACGCCC	CCGTCCTCGA	950
	GTCCTCAACC	GCCCACATTG	CTTCCAACTT	CTCTGAGCTG	CTTGAGAAGA	1000
	CTGCCACACT	TACCGGCAAG	TIGCAAGII	ACAACCCCAA	GTTCATCAAG	1050
	TTGACCGCCG	TACCGGCAAG	CARCATCCTT	CCTTCCAACC	CCATGTGTGT	1100
10	TCCGGTGATG	CCGCCATCGT	GAAGAIGGII	CCIICCAAGC	CC	1124
	CGAGTCCTTC	ACTGACTACC	CCCC			

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1363 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
- (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Genomic DNA
- 25 (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Penicillium marneffei
 - (B) STRAIN: WSA-214
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898

30				3 M C C 3 M 3 M M C	CTCTCTGGAA	50
	CTCAAGGCTG		TGGTATCACC		CCCGGTCACC	100
	GTTCCAGACT	GCCAAGTACG	AGGTTACCGT	CATTGACGCC	CGATTGCGCT	150
	GTGATTTCAT	CAAGAACATG	ATCACTGGTA	CCTCCCAGGC		200
	ATTCTCATCA	TTGCCTCTGG	TACTGGTGAA	TTCGAGGCTG	GTATCTCCAA	250 250
35	GGATGGCCAG	ACTCGTGAGC	ACGCTCTTTT	GGCTTTCACC	CTCGGTGTCC	300
	GTCAGCTCAT	TGTTGCCCTC	AACAAGATGG	ACACTTGCAA	GTGGTCTCAG	350
	GGTGAGTACT	CGTACCTGCG	TTTGGCCTTG	AATATCTTAC	TAATGCACCA	
	TAGATCGTTA	CAACGAAATT	GTCAAGGAGA	CTTCCAACTT	CATCAAGAAG	400
	GTCGGATACA	ACCCTAAGAA	CGTTCCTTTC	GTTCCTATCT	CCGGTTTCAA	450
40	CGGTGACAAC	ATGCTTGAGC	CCTCCCCCAA	CTGCCCCTGG	TACAAGGGTT	500
10	GGGAGAAGGA	GACCAAGGCC	GGTAAGGTCA	CTGGTAAGAC	CCTCCTCGAG	550
	GCCATCGACG	CCATTGAGCC	CCCTACCCGT	CCCGCCAACA	AGGTTAGTCC	600
	CTCCTCGACT	ACTCAAACCC	TCCTCATAAG	TTCATGATTA	CGACTCGTTC	650
	ACAGCCCCTC	CGTCTTCCCC	TCCAGGATGT	CTACAAGATC	GGTGGTATTG	700
45	GAACGGTTCC	CGTCGGTCGT	GTTGAGACTG	GTACCATCGT	TCCTGGTATG	750
40	GTTGTCACCT	TGTAAGTCAC	TCTCCTCGCT	TATCCTACCT	GAAATCATCA	800
	TGTGCTAACT	TGACACTCAG	CGCTCCCGCC	AACGTCACCA	CTGAAGTCAA	850
	GAGTGTTGAA	ATGCACCACC	AGCAGCTCAC	TGCCGGTCAG	CCCGGTGACA	900
	ACGTTGGTTT	CAACGTGAAG	AACGTCTCCG	TCAAGGAAAT	CCGTCGTGGT	950
- 0	AACGTTGCTG	GTGACAGCAA	GAACGACCCC	CCTGCCGGTG	CTGCCTCCTT	1000
50	CAACGCCCAG		TCAACCACCC	CGGTCAGGTC	GGTGCTGGTT	1050
	ACGCCCCAGT	CCTCGATTGC	CACACTGCCC	ACATTGCTTG	CAAGTTCGCT	1100
	GAGCTCCTCG	AGAAGATTGA	CCGTCGTACC	GGAAAGTCTG	TTGAGGACCA	1150
	CCCCAAGTTC	ATCAAGTCCG	GTGACGCTGC		ATGATTCCTT	1200
	CCAAGCCCAT	GTGTGTTGAG	GCTTTCACCG		TCTCGGTCGT	1250
55	TTCGCCGTTC	010111	TTTATCTCCG		TCCATCCTTC	1300
	CCTTCTCCTC					1350
	ACAAATCACG					1363
	WCWWW I CWCG	GGA				

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1147 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- 10 (ii) MOLECULE TYPE: Genomic DNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Piedraia hortai
 - (B) STRAIN: ATCC 24292

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899

	CAAGCTGAAA	GCCGAGCGTG	AGCGTGGTAT	CACTATCGAC	ATTGCCCTCT	50
	GGAAGTTCGA	GACTCCCAAG	TACTATGTCA	CCGTCATTGG	TACGTCGCAT	100
20	TATCTCACTC	CTCACAGAAG	CACGCTCCTA	ACATCACACA	GACGCTCCCG	150
	GTCACCGTGA	TTTCATCAAG	AACATGATCA	CTGGTACCTC	CCAGGCCGAC	200
	TGCGCTATCC	TCATTATCGC	TGCCGGTACT	GGTGAGTTCG	AGGCTGGTAT	250
	CTCCAAGGAT	GGCCAGACTC	GTGAGCACGC	CCTGCTCGCC	TACACCCTCG	300
	GTGTGCGTCA	GCTCATCGTC	GCCATCAACA	AGATGGACAC	CACCAAGTGG	350
25	TCTGAGGCCC	GTTACCAGGA	GATCATCAAG	GAGACCTCCA	ACTTCATCAA	400
	GAAGGTCGGC	TACAACCCCA	AGACCGTCGC	TTTCGTCCCC	ATCTCTGGCT	450
	TCAACGGCGA	CAACATGCTT	GCCCCTCCA	CCAACTGCCC	CTGGTACAAG	500
	GGATGGGAGC	GTGAGGTCAA	GGGCAACAAG	CAGACCGGCA	AGACCCTCCT	550
	CGAGGCCATT	GACGGCATTG	AGCCCCCAA	GCGTCCTTCC	GACAAGCCCC	600
30	TCCGTCTTCC	TCTCCAGGAT	GTTTACAAGA	TCGGTGGTAT	CGGAACTGTT	650
	CCTGTCGGCC	GTATCGAGAC	TGGTGTCCTC	AAGCCCGGTA	TGGTCGTTAC	700
	CTTCGCTCCC	GCCAACGTCA	CCACTGAAGT	CAAGTCCGTC	GAGATGCACC	750
	ACGAGCAGCT	CACTGAGGGT	CTTCCCGGTG	ACAACGTCGG	TTTCAACGTG	800
	AAGAACGTTT	CCGTCAAGGA	CATCCGCCGT	GGTAACGTTG	CCAGTGACTC	850
35	CAAGAACGAC	CCCGCTCTGG	GTGCCGCTTC	TTTCGACGCC	CAGGTCATCG	900
	TCCTCAACCA	CCCCGGTCAG	GTCGGTGCTG	GTTACGCCCC	GGTCCTCGAT	950
	TGCCACACTG	CCCACATTGC	TTGCAAGTTC	TCCGAGATCA	AGGAGAAGAT	1000
	CGACCGCCGT	ACCGGCAAGT	CTGTTGAGGA	CGCCCCAAG	TTCATCAAGT	1050
	CTGGTGACTC	TGCCATCGTC	AAGATGGTTC	CCTCCAAGCC	CATGTGCGTT	1100
40	GAGGCTTTCA	CCGACTACCC	TCCTCTGGGC	CGTTTCGCCG	TCCGTGA	1147

2) INFORMATION FOR SEQ ID NO: 900

45

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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1150 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
- (D) TOPOLOGY: Linear
 - (ii) MOLECULE TYPE: Genomic DNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Paecilomyces lilacinus
 - (B) STRAIN: ATCC 60735
 - (xi) SEQUENCE DESCRIPTION: SEO ID NO: 900
- 60 CTCAAGGCCG AGCGTGAGCG TGGTATCACC ATCGACATTG CCCTCTGGAA

	GTTCGAGACT CCCAAGTACT ATGTCACCGT CATTGGTACG TCGACTCGCG CGAGACTGGT CGCAATTTCC ACGTCGCTAA CGTGCTTGAA CAGACGCTCC CGGCCACCGT GACTTCATCA AGAACATGAT CACTGGTACC TCCCAGGCTG	100 150 200 250
5	ACTGCGCTAT CCTCATTATC GCTGCCGGCA CTGGTGAGII CGAGGCIGGI ATCTCCAAGG ATGGCCAGAC CCGTGAGCAC GCTCTGCTCG CCTACACCCT CGGTGTTAAG CAGCTCATCG TCGCTATCAA CAAGATGGAC ACCACCAAGT	300 350 400
10	AAGAAGGTCG GCTACAACCC CAAGACCGTC GCTTTCGTCC CCATCTCTGG TTTCCACGGC GACAACATGC TTTCCCCCTC CACCAACTGC CCCTGGTACA AGGGCTGGGA GAAGGAGACC AAGGCTGGCA AGTCCACCGG CAAGACCCTC CTTGAGGCCA TCGACTCCAT CGAGCCCCCC AAGCCGCCCCA GCGACAAGCC CCTCCGCCTT CCCCTTCAGG ATGTGTACAA GATCGGCGGT ATCGGCACAG CCCTCCGCCTTTCGAG ACTGGTGTCA TCAAGCCCGG CATGGTCGTG	450 500 550 600 650 700
15	ACCTTCGCTC CTTCCAACGT CACCACCGAA GTCAAGTCCG TIGAGAIGCA CCACGAGCAG CTCTCCGAGG GTGTCCCCGG TGACAACGTC GGCTTCAACG TCAAGAACGT CTCCGTCAAG GAGATCCGTC GTGGCAACGT CGCCGGTGAC TCCAAGAACG ACCCCCCTCT GGGTGCCGCT TCTTTCGATG CCCAGGTCAT CCCACGGCAACGC ACGTCGGTC TGGCTACGCC CCCGTCCTCG	750 800 850 900 950 1000
20	ACTGCCACAC CGCCCACATT GCCTGCAAGT TCGCCGAGAT CAAGGAGAAG ACTGCCACAC CGCCCACATT GCCTGCAAGT TCGCCGCACA AGTTCATCAA ATCGACCGCC GTACCGGCAA GTCTGTCGAG TCCGCCCCCA AGTTCATCAA GTCTGGCGAC TCTGCCATCG TCAAGATGAT TCCCTCCAAG CCCATGTGCG TTGAGGCTTT CACCGACTAC CCTCCTCTGG GCCGCTTCGC CGTCCGTGAC	1050 1100 1150
25	2) INFORMATION FOR SEQ ID NO: 901	
30	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 751 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
35	(ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE:	
	(A) ORGANISM: Paracoccidioides brasiliensis (B) STRAIN: ATCC 32075	
40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 901 TACCACTAAG TGGTCCGAGA CCCGATTCAA TGAAATTATC AAGGAAGTCA	50
45	CCAATTTCAT TAAGAAGGTC GGATATAACC CCAAGACTGT TCCTTTCGTT CCCATTTCTG GTTTCGAGGG TGACAACATG ATCGAGCCCT CTGCCAACTG CCCATGGTAC AAGGGCTGGT CCAAGGAGAC TGCTCAGGGC AAGTACTCTG GCAAGACCCT TCTTGAGGCC ATCGACGCCA TTGAGCCCCC CACCCGTCCT ACCGATAAAC CTCTCCGTCT TCCCCTCCAG GATGTCTACA AGATCTCCGG TATTCCCACT GTTCCTGTCG GACGTGTTGA GACTGGAGTC ATCAAGCCCG	100 150 200 250 300 350
50	GTATGGTCGT GACCTTCGCT CCCGCCAACG TCACCACTGA AGTCAAGTCC GTCGAAATGC ACCACCAGCA GCTTACCGCC GGTAACCCCG GTGACAACGT CGGCTTCAAC GTCAAGAATG TTTCCGTCAA AGAAGTCCGC CGTGGTAACG TTCCCCGTGA CTCTAAGAAT GATCCCCCAA AGGGCTGCGA TTCCTTCAAT	400 450 500 550
55	GCCAGGTCA TCGTCCTCAA CCACCCTGGT CAGGTTGGCG CTGGTTATGC CCCAGTCCTC GACTGCCATA CTGCCCACAT TGCCTGCAAA TTCGCTGAGC TCCTTGAGAA GATTGATCGA CGAACCGGAA AGTCTGTTGA GAACAACCCC AAGTTCATCA AGTCCGGTGA TGCTGCTATC GTCAAGATGA TTCCTTCCAA	600 650 700 750 751

(i) SEQUENCE CHARACTERISTICS: LENGTH: 1056 bases (A) 5 TYPE: Nucleic acid (B) STRANDEDNESS: Double (C) (D) TOPOLOGY: Linear (ii) MOLECULE TYPE: Genomic DNA 10 (vi) ORIGINAL SOURCE: (A) ORGANISM: Sporothrix schenckii STRAIN: ATCC 7968 (B) 15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902 CGTGAGCGCG GTATCACCAT CGATATTGCT CTGTGGAAGT TCGAGACCCC 50 CAAGTACTAC GTCACCGTCA TTGACGCCCC CGGTCATCGC GATTTCATCA AGAACATGAT CACTGGTACC TCGCAGGCCG ACTGCGCCAT TCTCATCATT GCCGCTGGTA CTGGTGAGTT CGAGGCTGGT ATCTCCAAGG ATGGCCAGAC 100 150 200 20 TCGTGAGCAC GCTCTGCTCG CCTACACCCT GGGTGTGCGG CAGCTGATCG 250 TCGCCATCAA CAAGATGGAC ACGGCCAAGT GGGCTGAGGC TCGTTACCAG 300 GAGATCATCA AGGAGACCTC CAACTTCATC AAGAAGGTCG GCTACAACCC CAAGACTGTT GCCTTCGTCC CCATCTCGGG CTTCCACGGC GACAACATGC 400 TTACTCCCTC GACCAACTGC CCCTGGTACA AGGGCTGGGA GAAGGAGGGC 450 25 AAGAGCGGCA AGGTTACCGG TAAGACTCTG CTGGACGCCA TTGACGCCGT 500 CGAGCCCCC AAGCGCCCCA CGGACAAGCC CCTGCGTCTG CCCCTCCAGG 550 ATGTCTACAA GATCGGCGGT ATCGGCACTG TCCCTGTCGG CCGTATCGAG 600 ACTGGTGTCC TGAAGCCCGG CATGGTCGTC ACCTTTGCCC CGTCCAACGT 650 CACCACTGAA GTCAAGTCCG TCGAGATGCA CCACGAGCAG CTTGTTGAGG 700 GTGTTCCCGG CGACAACGTC GGCTTCAACG TCAAGAACGT CTCCGTCAAG 750 GAGATCCGTC GTGGCAACGT TGCCGGTGAC TCCAAGAACG ACCCCCCTC 800 GGGCGCCGCC ACCTTCAACG CCCAGGTCAT TGTCCTGAAC CACCCCGGCC 850 AGGTCGGCAA CGGCTACGCC CCGGTTCTGG ACTGCCACAC CGCCCACATT 900 GCCTGCAAGT TCACCGAGAT CCTTGAGAAG ATCGACCGCC GTACCGGCAA 950 35 GTCGGTTGAG AACAACCCCA AGTTCATCAA GTCGGGTGAC GCCGCCATTG 1000 TCAAGCTGAC GCCCTCGAAG CCCATGTGCG TTGAGGCCTT CACTGACTAC 1050 CCCCCT 1056 40 2) INFORMATION FOR SEO ID NO: 903 (i) SEQUENCE CHARACTERISTICS: 45 LENGTH: 1366 bases (A) (B) TYPE: Nucleic acid STRANDEDNESS: Double (C) (D) TOPOLOGY: Linear 50 (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Penicillium marneffei STRAIN: ATCC 58950 55 (xi) SEQUENCE DESCRIPTION: SEO ID NO: 903 CAAGGCTGAG CGTGAGCGTG GTATCACCAT CGATATTGCT CTCTGGAAGT 50 TCCAGACTGC CAAGTACGAG GTTACCGTCA TTGACGCCCC CGGTCACCGT 100 GATTTCATCA AGAACATGAT CACTGGTACC TCCCAGGCCG ATTGCGCTAT 150

	TCTCATCATT	GCCTCTGGTA	CTGGTGAATT	CGAGGCTGGT	ATCTCCAAGG	200
	ATGGCCAGAC	TCGTGAGCAC	GCTCTTTTGG	CTTTCACCCT	CGGTGTCCGT	250
	CAGCTCATTG	TTGCCCTCAA	CAAGATGGAC	ACTTGCAAGT	GGTCTCAGGG	300
	TGAGTACTCG	TACCTGCGTT	TGGCCTTGAA	TATCTTACTA	ATGCACCATA	350
5	GATCGTTACA	ACGAAATTGT	CAAGGAGACT	TCCAACTTCA	TCAAGAAGGT	400
5	CGGATACAAC	CCTAAGAACG	TTCCTTTCGT	TCCTATCTCC	GGTTTCAACG	450
	GTGACAACAT	GCTTGAGCCC	TCCCCCAACT	GCCCCTGGTA	CAAGGGTTGG	500
	GAGAAGGAGA	CCAAGGCCGG	TAAGGTCACT	GGTAAGACCC	TCCTCGAGGC	550
	CATCGACGCC	ATTGAGCCCC	CTACCCGTCC	CGCCAACAAG	GTTAGTCCCT	600
10	CCTCGACTAC	TCAAACCCTC	CTCATAAGTT	CAGATTACTG	ACTCGTTCAC	650
10	AGCCCCTCCG	TCTTCCCCTC	CAGGATGTCT	ACAAGATCGG	TGGTATTGGA	700
	ACGGTTCCCG	TCGGTCGTGT	TGAGACTGGT	ACCATCGTTC	CTGGTATGGT	750
	TGTCACCTTG	TAAGTCACTC	TCCTCGCTTA	TCCTACCTGA	AATCATCATG	800
	TGCTAACTTG	ACACTCAGCG	CTCCCGCCAA	CGTCACCACT	GAAGTCAAGA	850
	GTGTTGAAAT	GCACCACCAG	CAGCTCACTG	CCGGTCAGCC	CGGTGACAAC	900
15	GTTGGTTTCA	ACGTGAAGAA	CGTCTCCGTC	AAGGAAATCC	GTCGTGGTAA	950
	CGTTGCTGGT	GACAGCAAGA	ACGACCCCCC	TGCCGGTGCT	GCCTCCTTCA	1000
	ACGCCCAGGT	CATCGTCCTC	AACCACCCCG	GTCAGGTCGG	TGCTGGTTAC	1050
	GCCCCAGTCC	TCGATTGCCA	CACTGCCCAC	ATTGCTTGCA	AGTTCGCTGA	1100
0.0	GCCCCAGICC	AAGATTGACC	GTCGTACCGG	AAAGTCTGTT	GAGGACCACC	1150
20		CAAGTCCGGT	GACGCTGCCA	TCGTCAAGAT	GATTCCTTCC	1200
	CCAAGTTCAT	GTGTTGAGGC	TTTCACCGAG	TACCCTCCTC	TCGGTCGTTT	1250
	AAGCCCATGT	GAGTAAGTTT	TATCTCCGTT	GTCTATTTTC	CATCCTTCCC	1300
	CGCCGTTCGC	TCTTCCATAT	ATATTTTTTC	AGTTATATGT	GACTAACCAC	1350
	TTCTCCTCCG		MINITITIC	HOLIMINIOL		1366
25	AAATCACGGG	AATAGC				

30 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 841 bases
- (B) TYPE: Nucleic acid
- (C) STRANDEDNESS: Double
- 35 (D) TOPOLOGY: Linear
 - (ii) MOLECULE TYPE: Genomic DNA
 - (vi) ORIGINAL SOURCE:

- (A) ORGANISM: Curvularia lunata
 - (B) STRAIN: ATCC 26425
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904

45	CTATTATCGT	TGTTGCCGCT	TCCGACGGTC	AAATGCCCCA	GACTCGTGAG	50
1.0	CATCTGCTGC	TCGCCCGCCA	GGTCGGTGTC	CAGAAGATCG	TTGTCTTCGT	100
	CAACAAGGTC	GATGCTGTTG	AGGACAAGGA	GATGTTGGAG	CTCGTCGAGA	150
	TGGAGATGCG	CGAATTGCTC	AGCAGCTACG	GCTTCGAGGG	CGACGAGACT	200
	CCCATCATCA	TGGGATCTGC	CCTCTGCGCC	ATTGAGGGCC	GCGAACCTGA	250
50	GATTGGTGTC	AACCGAATTG	ATGAGCTGCT	CGAGGCCGTT	GATACTTGGA	300
-	TCCCCACCCC	TCAGCGTGAG	ACCGACAAGC	CTTTCCTCAT	GGCCGTCGAG	350
	GATGTCTTCT	CCATTGCTGG	TCGTGGCACT	GTCGTCTCTG	GCCGTGTCGA	400
	GCGAGGTATC	CTGAAGCGCG	ATGCTGAAGT	TGAGCTCGTC	GGCAAGGGCA	450
	CCGCCCCCAT	CAAGACCAAG	GTTACCGATA	TCGAGACCTT	CAAGAAGTCC	500
55	TGCGAGGAGT	CTCGCGCTGG	TGACAACTCC	GGTCTCCTTC	TTCGTGGTGT	550
	CAAGCGTGAT	GAAGTCCGCC	GTGGTATGGT	CGTTTCCGTC	CCTGGACAGG	600
	TCAAGGCGCA	CAAGAAGTTC	CTTGTCTCCA	TGTACGTGTT	GAGCAAGGAG	650
	GAAGGTGGTC	GTCACACTGG	CTTCGGTGAG	AACTACAGGC	CGCAAATGTT	700
	CATCCGCACT	GCCGACGAGT	CGTGTGCCCT	GTACTGGCCA	GAAGGCACCG	750
60	AGGACGCCCA	TGACAAGCTT	GTTATGCCCG	GTGACAACGT	CGAGATGGTT	800

841

TGCGAGCTCC ATGCACCACA CGTCTTGGAG CCTGGTCAAC G

5	2) INFORMATION FOR SEQ ID NO: 905	
10	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 967 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double(D) TOPOLOGY: Linear	,
	(ii) MOLECULE TYPE: Genomic DNA	
15	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Aspergillus niger (B) STRAIN: ATCC 9508</pre>	
20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905	
20	CGGTGCTATC ATTGTCGTCG CCGCCTCCGA CGGTCAGATG TACGTTAACC TTAAAAGAAT AACTCTCCTT CAGTATATAT GCTTACACTG GCGATCAACA GGCCCCAGAC TCGTGAGCAC TTGCTGCTTG CTCGTCAGGT CGGTGTCCAG AAGATCGTTG TCTTCGTCAA CAAGGTCGAT GCTATCGATG ACCCCGAGAT	50 100 150 200
25	GCTGGAGCTC GTTGAGCTGG AAATGCGCGA GCTTCTCAGC ACCTACGGAT TCGAGGGTGA GGAGACCCCC ATCGTCTTCG GCTCTGCTCT	250 300 350 400
30	TCTTGATGTC CATTGAGGAA GTTTTCTCCA TCCCCGGTCG TGGTACCGTC GCCTCCGGCC GTGTCGAGCG TGGTCTCCTG AAGCGTGATA GCGAGGTTGA GATCATCGGT ACCACCAACG AGGTCATCAA GACCAAGGTT ACCGACATTG AGACCTTCAA GAAGTCCTGC TCCGAGTCCC GCGCCGGTGA CAACTCCGGT CTCCTGCTCC GTGGTGTCCG CCGTGAGGAT CTCCGCCGTG GTATGGTCAT	450 500 550 600 650
35	TGCCGCTCCT GGCAGCGCCA AGGCCAACAG CAAGTTCATG GTCTCCATGT ACGTCCTGAC CGAGGCTGAR GGTGGTCGCC GTACCGGTTT CGGTGTCCAG TACCGTCCCC AGCTGTTCAT CCGCACTGCC GGTAAGTAAA ATTGCATTCT ATTCCGCTAC TAGGGAACCA TCTCTAATTC TATTTGCTAC AGATGAGGCT GCTGAGTTCA GCTTCCCCGA CGGAGACCAG TCCCGCCGTA TCATGCCCGG	700 750 800 850 900
40	TGACAACGTC GAGATGATCG TCAAGACCCA CCGCCCGTC GCCGCCGAGG CCGGTCAGCG CTTCAAC	950 967
45	2) INFORMATION FOR SEQ ID NO: 906	
	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 852 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double	
50	(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
55	(vi) ORIGINAL SOURCE:(A) ORGANISM: Bipolaris hawaiiensis(B) STRAIN: ATCC 26067	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906	
60	TGGTGCTATT ATTGTTGTTG CCGCTTCCGA CGGTCAAATG CCCCAGACTC	50

	GTGAGCATCT	GCTGCTCGCC	CGTCAGGTCG	GTGTTCAGAA	GATCGTTGTC	100
	TTCGTTAACA	AGGTCGACGC	TGTCGAGGAC	AAGGAGATGT	TGGAGCTTGT	150
	CGAGATGGAG	ATGCGCGAAC	TGCTCAGCAG	CTATGGCTTC	GAGGGCGACG	200
	AGACCCCTAT	CATCATGGGT	TCTGCTCTCT	GCGCCATTGA	AGGCCGTCAA	250
5	CCCGACATTG	GTGTCGAACG	AATTGACGAG	CTGCTCGAGG	CTGTTGATAC	300
5	TTGGATTCCC	ACCCCTCAGC	GTGAGACCGA	AAAGCCTTTC	CTCATGGCCG	350
	TCGAGGATGT	CTTCTCCATT	GCTGGTCGTG	GTACCGTCGT	CTCTGGCCGT	400
	GTCGAACGAG	GTATCCTGAA	GCGCGATGCT	GAAGTTGAGC	TTGTGGGCAA	450
	GGGCAGCGCA	CCCATCAAGA	CCAAGGTTAC	CGATATCGAG	ACCTTCAAGA	500
10	AGTCTTGCGA	GGAGTCCCGC	GCTGGTGACA	ACTCCGGTCT	CCTTCTTCGT	550
10	GGTGTTAAGC	GTGATGAAGT	CCGCCGTGGT	ATGGTCGTTT	CCGTCCCTGG	600
	ACAGGTTAAG	GCGCACAAGA	AGTTCCTTGT	CTCCATGTAT	GTGCTGAGCA	650
	AGGAGGAAGG	TGGCCGACAC	ACTGGCTTCG	GTGAGAACTA	CAGGCCGCAA	700
	ATGTTCATCC	GCACTGCCGA	CGAGTCGTGT	GCCCTGTACT	GGCCAGAAGG	750
15	CACCGAGGAT	GCCCACGACA	AGCTTGTCAT	GCCCGGTGAC	AACGTCGAGA	800
	TGGTTTGCGA	GCTCCATGCA	CCACACGTCT	TGGAGACTGG	TCAGCGCTTC	850
	AA					852

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 966 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Genomic DNA
- 30 (vi) ORIGINAL SOURCE:

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- (A) ORGANISM: Aspergillus flavus
- (B) STRAIN: ATCC 26947
- 35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907

	GGTGCTATTG	TTGTCGTTGC	TGCTTCGGAT	GGTCATGATG	TATGGACAGG	50
	CCCTTTGCTA	CTGAATGGTT	TCAAGATCTC	GCGCTTACAC	GTATTATAAT	100
	AGGCCCCAGA	CCCGGGAGCA	CTTGCTGCTT	GCCCGTCAGG	TCGGTGTCCA	150
40	GAAGATCGTC	GTTTTTGTCA	ACAAGATTGA	TGCCGTTGAG	GACCCTGAGA	200
40	TGTTGGAGCT	TGTCGAGTTG	GAAATGCGCG	AGCTCCTTAG	CAGCTACGGC	250
	TTCGAGGGCG	AAGAGACTCC	CATCATCTTC	GGTTCTGCTC	TGTGTGCTTT	300
	GGAGGACCGT	CGCCCCGACA	TTGGTGCCGA	GCGTATCGAC	GAGCTCATGA	350
	AGGCCGTTGA	CACCTGGATC	CCTACCCCTC	AGCGTGATCT	TGACAAGCCT	400
45	TTCCTCATGT	CTGTCGAGGA	AGTCTTCTCC	ATCGCCGGTC	GTGGTACCGT	450
	TGCCTCCGGC	CGTGTCGAAC	GTGGTATCCT	GAAGAAGGAC	AGCGAAGTCG	500
	AGATCATCGG	AGGTAGCTTC	GATGCTACCA	AGACCAAGGT	CACCGACATT	550
	GAGACCTTCA	AGAAGTCTTG	TGACGAGTCC	CGCGCTGGTG	ACAACTCTGG	600
	CTTGCTTCTC	CGTGGTATCC	GTCGTGAAGA	CGTCCGCCGC	GGAATGATCA	650
50	TTGCTGCTCC	TGGCAGCACC	AAGGCCCACG	ACCAGTTCTT	GGTGTCCATG	700
-	TACGTTCTCA	CTGAGGCTGA	GGGTGGTCGT	CGTACTGGCT	TCGGCTCCAA	750
	CTACCGCCCC	CAGGTGTTCG	TTCGCACTGC	TGGTAAGTCA	AGCCTTTTGC	800
	TCACTTAACG	GTATTGATTA	AGTTCTAACT	GTTGTATCCT	AGATGAGGCT	850
	GCTGACCTCA	GCTTCCCCGA	CGGTGATGAG	TCCCGGAGGG	TGATGCCTGG	900
55	TGACAACGTC	GAGATGGTCC	TCAAGACTCA	CCGCCCCATT	GCTGCTGAGG	950
	CTGGCCAGCG	CTTCAA				966

2) INFORMATION FOR SEQ ID NO: 908

5	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 845 bases(B) TYPE: Nucleic acid(C) STRANDEDNESS: Double(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
10	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Alternaria alternat (B) STRAIN: ATCC 62099</pre>	a .
15	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9	08
13	GGTGCTATCA TCGTCGTTGC TGCTTCCGAT GGTCAGAT TGAGCACTTG CTGCTCGCCC GTCAGGTCGG TGTTCAGA TCGTCAACAA GGTCGATGCT GTCGAAGACC CGGAGATG GAGATGGAGA TGCGTGAGTT ACTCACCAGC TACGGCTT	AG ATCGTTGTCT 100 TT GGAACTCGTC 150
20	GACACCATC ATCATGGGTT CCGCTCTATG CGCCATCG CCGAGATCGG TGTTACCAAG GTCGACGAGC TAATGGAC TGGATCCCCA CCCCTCAGCG TGAGACCGAG AAGCCTTT TGAGGATGTC TTCTCGATTG CTGGACGTGG TACCGTCG	AG GGCCGCCAGC 250 GC TGTCGACTCA 300 CC TCATGGCTGT 350
25	TCGAGCGCGG TATCTTGAAG CGTGACGCTG AAGTCGAG GGCACCGCGC CAATCAAGAC CAAGGTCACT GATATTGA GTCGTGCGAG GAGTCGCGCG CGGGTGATAA CTCCGGTC GTGTCAAGCG TGATGACGTT CGCCGCGGTA TGGTTGTT	CT TGTCGGCAAG 450 GA CCTTCAAGAA 500 TT CTCCTCCGTG 550
30	CAAGTCAAGG CTCACAAGAA GTTCCTTGTC TCCATGTA AGAGGAGGGT GGTCGTCACA CCGGCTTCGG CGAGAACT TGTTCATCCG AACTGCCGAT GAATCCTGCG CACTTCAC ACCGAGGATG CGCACGACAA GCTAGTTATG CCCGGTGA GGTCTGCGAA CTCCACCAGC CCCACGTTCT AGAGACCG	CG TTCTAAGCAA 650 AC AGGCCGCAAA 700 TT CCCAGAGGGT 750 CA ACGTCGAGAT 800
35	2) INFORMATION FOR SEQ ID NO: 909	
40	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 931 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
45	<pre>(ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE:</pre>	
	(A) ORGANISM: Penicillium marneff(B) STRAIN: ATCC 64101	ei
50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9	09
55	CGCTGTTGTT GTCGTCGCTG CTTCTGATGG TCAAATGT AGCTGCCAAT TATGGACACT GCTGATAAGA ATAGGCCC CACTTGCTCC TCGCCCGTCA GGTCGGTGTT CAAAAGAT CAACAAGGTT GATGCCGTCG AGGACCCCGA GATGTTGG TGGAAATGCG TGAACTCTTG ACCACCTACG GTTTCGAG CCTATCATTT TCGGATCCGC TCTTTGCGCC TTGGAAGG	CA AACCCGTGAG 100 CG TCGTCTTCGT 150 AA CTTGTCGAAT 200 GG TGAAGAGACC 250
60	GATTGGCGAA CAGAAGATTG ACGAGCTCAT GAACGCCG TCCCCACCCC CCAGCGTGAC CTTGACAAGC CCTTCTTG GAAGTTTTCT CCATCTCTGG TCGTGGTACC GTTGCATC	TT GATACCTGGA 350 AT GTCCGTTGAG 400

5	GCGTGGTATT TTGCGCAAGG ATTCTGAGGT TGAGATTATC GGATACCAGA GAACCCTAT CAAGACCAAG GTTACCGACA TTGAGACCTT CAAGAAGTCT TGCGATGAAT CTCGTGCTGG TGACAACTCT GGCTTGCTTC TCCGTGGTAT TATCGCTGCT TGACAACTCT TGGTATGCT TATCGCTGCT CCTGGAACCA TTGAGACCAC GTCGTACTGG TTGGTCTCCA TGTATGTCTT GACTGAGCT CTCAAGCTTT TGGTCTCCA ACTACCGTC CTCAAGCTTT TCCCTTTCAA AGTCAATTAA TGAGCGATTT TATAGATGAG GCTGCTACTC TCAGCTTCCC CGGTGACGAT TATAGATGAC AGGTCAACCAC GTTGAGATGA TCTTGAAGAC GTTGAGATGA TCTTGAAGAC GTTGAGATGA TCTTGAAGAC GTTGAGATGA TCTTGAAGAC GTTGAGATGA TCTTGAAGAC GTTGAGATGA TCTTGAAGAC	500 550 600 650 700 750 800 850 900 931
15	2) INFORMATION FOR SEQ ID NO: 910 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 931 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
20	(ii) MOLECULE TYPE: Genomic DNA	
25	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Penicillium marneffei (B) STRAIN: ATCC 58950 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910</pre>	
30	CGCTGTTGTT GTCGTCGCTG CTTCTGATGG TCAAATGTAA CATATCCACG AGCTGCCAAT TATGGACACT GCTGATAAGA ATAGGCCCCA AACCCGTGAG	50 100
35	CACTTGCTCC TCGCCCGTCA GGTCGGTGTT CAAAAGATCG TCGTCTTCGT CAACAAGGTT GATGCCGTCG AGGACCCCGA GATGTTGGAA CTTGTCGAAT TGGAAATGCG TGAACTCTTG ACCACCTACG GTTTCGAGGG TGAAGAGACC CCTATCATTT TCGGATCCGC TCTTTGCGCC TTGGAAGGCC GCAAGCCCGA GATTGGCGAA CAGAAGATTG ACGAGCTCAT GAACGCCGTT GATACCTGGA TCCCCACCCC CCAGCGTGAC CTTGACAAGC CCTTCTTGAT GTCCGTTGAG GAAGTTTTCT CCATCTCTGG TCGTGGTACC GTTGCATCTG GTCGTGTTGA CCGTGGTATT TTGCGCAAGG ATTCTGAGGT TGAGATTATC GGATACCAGA	150 200 250 300 350 400 450 500
40	AGAACCCTAT CAAGACCAAG GTTACCGACA TTGAGACCTT CAAGAAGTCT TGCGATGAAT CTCGTGCTGG TGACAACTCT GGCTTGCTTC TCCGTGGTAT	600
45	CAAGCGTGAG GACATTCGTC GTGGTATGGT TATCGCTGCT CCTGGAACCA CCAAGGCTCA TGACAACTTC TTGGTCTCCA TGTATGTCTT GACTGAGGCT GAAGGTGGTC GTCGTACTG ATTCGGCGCC AACTACCGTC CTCAAGCTTT CATCCGTACT GCCGGTATGT TCCCTTTCAA AGTCAATTAA TGAGCGATTT GCTAACGAGT TATAGATGAG GCTGCTACTC TCAGCTTCCC CGGTGACGAT CAGTCCAAGC AGGTCATGCC CGGTGACAAC GTTGAGATGA TCTTGAAGAC ACACCGTCCC GTTGCCGCCG AAGCTGGTCA G	650 700 750 800 850 900 931
50		

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 bases
- (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: DNA 60

	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 911	
5	GACGGM	KKCA TGCCGCARAC	20
	2) INFO	RMATION FOR SEQ ID NO: 912	
10	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
15	(ii)	MOLECULE TYPE: DNA	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 912	
20	GACGGC	GKCA TGCCGCARAC	20
	2) INFO	RMATION FOR SEQ ID NO: 913	
25	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid	
30		(C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
	(ii)	MOLECULE TYPE: DNA	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 913	
35	GACGGY	EYCA TGCCKCAGAC	20
40	2) INFO	RMATION FOR SEQ ID NO: 914	
45	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 21 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
	(ii)	MOLECULE TYPE: DNA	
50	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 914	
	GAARAGO	CTGC GGRCGRTAGT G	21
55	2) INFOR	RMATION FOR SEQ ID NO: 915	
60	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 21 bases (B) TYPE: Nucleic acid	

	(C) STRANDEDNESS: SINGLE (D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: DNA	
5	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915	
	AAACGCCTGA GGRCGGTAGT T	21
10		
	2) INFORMATION FOR SEQ ID NO: 916	
15	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear 	
20	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 916	
25	GCCGAGCTGG CCGGCTTCAG	20
	2) INFORMATION FOR SEQ ID NO: 917	
30	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 22 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear 	
35	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917	
40	TCGTGCTACC CGTYGCCGCC AT	22
45	2) INFORMATION FOR SEQ ID NO: 918	
47	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1391 bases (B) TYPE: Nucleic acid	
50	(C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: Genomic DNA	
55	(vi) ORIGINAL SOURCE:(A) ORGANISM: Escherichia coli(C) ACCESSION NUMBER: J01672	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918	
60	AGAGAAGCCT GTCGGCACCG TCTGGTTTGC TTTTGCCACT GCCCGCGGTG 50)

	AAGGCATTAC CCGGCGGGAT GCTTCAGCGG CGACCGTGAT GCGGTGCGTC 100	
	GTCAGGCTAC TGCGTATGCA TTGCAGACCT TGTGGCAACA ATTTCTACAA 150	
	AACACTTGAT ACTGTATGAG CATACAGTAT AATTGCTTCA ACAGAACATA 200	
	TTGACTATCC GGTATTACCC GGCATGACAG GAGTAAAAAT GGCTATCGAC 250	
5	GAAAACAAAC AGAAAGCGTT GGCGGCAGCA CTGGGCCAGA TTGAGAAACA 300	
	ATTTGGTAAA GGCTCCATCA TGCGCCTGGG TGAAGACCGT TCCATGGATG 350	
	TGGAAACCAT CTCTACCGGT TCGCTTTCAC TGGATATCGC GCTTGGGGCA 400	
	GGTGGTCTGC CGATGGGCCG TATCGTCGAA ATCTACGGAC CGGAATCTTC 450	
	CGGTAAAACC ACGCTGACGC TGCAGGTGAT CGCCGCAGCG CAGCGTGAAG 500	
10	GTAAAACCTG TGCGTTTATC GATGCTGAAC ACGCGCTGGA CCCAATCTAC 550	
10	GCACGTAAAC TGGGCGTCGA TATCGACAAC CTGCTGTGCT CCCAGCCGGA 600	
	CACCGGCGAG CAGGCACTGG AAATCTGTGA CGCCCTGGCG CGTTCTGGCG 650	
	CAGTAGACGT TATCGTCGTT GACTCCGTGG CGGCACTGAC GCCGAAAGCG 700	
	GAAATCGAAG GCGAAATCGG CGACTCTCAC ATGGGCCTTG CGGCACGTAT 750	
15	GATGAGCCAG GCGATGCGTA AGCTGGCGGG TAACCTGAAG CAGTCCAACA 800	
	CGCTGCTGAT CTTCATCAAC CAGATCCGTA TGAAAATTGG TGTGATGTTC 850	
	GGTAACCCGG AAACCACTAC CGGTGGTAAC GCGCTGAAAT TCTACGCCTC 900	
	TGTTCGTCTC GACATCCGTC GTATCGGCGC GGTGAAAGAG GGCGAAAACG 950	
	TGGTGGGTAG CGAAACCCGC GTGAAAGTGG TGAAGAACAA AATCGCTGCG 1000	
20	CCGTTTAAAC AGGCTGAATT CCAGATCCTC TACGGCGAAG GTATCAACTT 1050	
	CTACGGCGAA CTGGTTGACC TGGGCGTAAA AGAGAAGCTG ATCGAGAAAG 1100	
	CAGGCGCGTG GTACAGCTAC AAAGGTGAGA AGATCGGTCA GGGTAAAGCG 1150	
	AATGCGACTG CCTGGCTGAA AGATAACCCG GAAACCGCGA AAGAGATCGA 1200	
	GAAGAAAGTA CGTGAGTTGC TGCTGAGCAA CCCGAACTCA ACGCCGGATT 1250	
25	TCTCTGTAGA TGATAGCGAA GGCGTAGCAG AAACTAACGA AGATTTTTAA 1300	
	TCGTCTTGTT TGATACACAA GGGTCGCATC TGCGGCCCTT TTGCTTTTTT 1350	
	AAGTTGTAAG GATATGCCAT GACAGAATCA ACATCCCGTC G 1391	
30		
30	2) INFORMATION FOR SEQ ID NO: 919	
	(i) SEQUENCE CHARACTERISTICS:	
	(A) LENGTH: 23 bases	
35	(B) TYPE: Nucleic acid	
	(C) STRANDEDNESS: Single	
	(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: DNA	
40		
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919	
	GGICCIGART CITMIGGIAA RAC	23
45		
	2) INFORMATION FOR SEQ ID NO: 920	
	(i) SEQUENCE CHARACTERISTICS:	
50	(A) LENGTH: 23 bases	
50	(B) TYPE: Nucleic acid	
	(C) STRANDEDNESS: Single	
	(D) TOPOLOGY: Linear	
	(2) Toronour Himar	
55	(ii) MOLECULE TYPE: DNA	
	/wil SECTIONS DESCRIPTION, SEC ID NO. 000	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920	
	TCICCVATIT CICCITCIAI YTC	23
60		

	2) INFO	RMATION FOR SEQ ID NO: 921	
5	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
10	(ii)	MOLECULE TYPE: DNA	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 921	
15	TIYRTI	GAYG CIGARCAIGC	20
20	2) INFO	RMATION FOR SEQ ID NO: 922	
20	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single	
25		(D) TOPOLOGY: Linear	
	-	MOLECULE TYPE: DNA	
3Ó		SEQUENCE DESCRIPTION: SEQ ID NO: 922	23
		ORMATION FOR SEQ ID NO: 923	23
35		The second of th	
40	(i)	(A) LENGTH: 21 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
	(ii)	MOLECULE TYPE: DNA	
45	(xi)) SEQUENCE DESCRIPTION: SEQ ID NO: 923	
	GACGCI	IGCCA TCCTGATGAT C 21	
50	-	ORMATION FOR SEQ ID NO: 924	
55	(i)) SEQUENCE CHARACTERISTICS: (A) LENGTH: 21 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
60	(ii)) MOLECULE TYPE: DNA	

	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924	
	ACCTCAGTCG TCACGTTGGC G	21
5		
	2) INFORMATION FOR SEQ ID NO: 925	
10	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear 	
15	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925	
20	AAGCAGATGG TTGTGTGCTG	20
	2) INFORMATION FOR SEQ ID NO: 926	
25	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 24 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear 	
30	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926	
35		
35	CAGCTGCTCG TGGTGCATCT CGAT	24
40	2) INFORMATION FOR SEQ ID NO: 927	
45	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 19 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear 	
43	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927	
50	ACGCGGAGAA GGTGCGCTT	
		19
55	2) INFORMATION FOR SEQ ID NO: 928	
	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 22 bases(B) TYPE: Nucleic acid	
60	(C) STRANDEDNESS: Single	

	(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: DNA	
5	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928	
	GGTCGTTCTT CGAGTCACCG CA	22
10	2) INFORMATION FOR SEQ ID NO: 929	
15	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 448 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
0.0	(ii) MOLECULE TYPE: Genomic DNA	
20	(vi) ORIGINAL SOURCE:(A) ORGANISM: Bacteroides fragilis(B) STRAIN: ATCC 25285	
25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929	
30 35	TTCAGCATGC CATTTCAAAA CAGGCCGAAG CCGATATCGT GATTATCGCT GCTTGTGGGG AGCGTGCAAA TGAAGTTGTG GAAATCTTTA CCGAATTTCC GGAATTGGTG GACCCGCACA CGGGACGTAA GCTGATGGAG CGTACCATTA TTATCGCAAA TACATCGAAC ATGCCGGTAG CAGCGCGTGA AGCTTCTGTG CCTGCTGATG GCAGACTCCA CTTCCCGTTG GGCGCATGG GATTGAAAGT TGTCGAACCG TATGGAGGAG TTGCCCGGAC CGGATGCATT CCCGATGGAC CTGTCCTCAA TCATTTCTAA CTTCTATGGC CGTGCAGGCT ACGTGAAACT GAATAACGGC GAGAGCGGTT CTATTACCTT TATCGGTACA GTATCACC 448	
40	2) INFORMATION FOR SEQ ID NO: 930 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 438 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double	
45	(D) TOPOLOGY: Linear	
50	 (ii) MOLECULE TYPE: Genomic DNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Bacteroides distasonis (B) STRAIN: ATCC 8503 	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930	
55	GCTATCTCTA AACAAGCGGA AGCGGATATC GTGATTATCG CCGCCTGCGG 50 TGAGCGTGCG AATGAGGTCG TAGAGGTATT TACGGAGTTC CCGGAATTGG 100 TAGACCCGCA TACGGGACGT AAATTGATGG AACGTACGAT CATTATCGCC 150 AATACATCCA ACATGCCGGT AGCCGCTCGT GAGGCATCCG TATATACGGC 200 GATGACCATC GCCGAGTATT ATCGCAGCAT GGGTTTGAAG GTTCTGTTGA 250	
60	TOCOCOLOTO TACTTOCOCO TEGGOLOGO CTTTGCGTGA GATGTCCAAC	

	CGTTTGGAGG AGTTGCCGGG ACCGGATGCT TTCCCGATGG ACTTGTCCGC TATCGTGGCG AACTTCTACG CTCGTGCGGG ATTCGTTCAT TTGAATAACA ACGCTACAGG CTCCGTCACT TTCATCGGTA CGGTATCG	350 400 438
5		
	2) INFORMATION FOR SEQ ID NO: 931	
10	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 453 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
15	(ii) MOLECULE TYPE: Genomic DNA	
20	(vi) ORIGINAL SOURCE:(A) ORGANISM: Porphyromonas asaccharolytica(B) STRAIN: ATCC 25260	
20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931	
25	CCTCCAGCAC GCTATCTCTA AGCAGGCGGA GGCTGATATC GTCATTATGG CAGCCTGCGG TGAGCGTGCT AATGAGGTGG TGGAGATCTT TGCCGAGTTC CCTGAGCTCG AAGACCCACA CACGGGACGC AAGCTGATGG AGCGTACGAT CATCATCGCT AACACGAGTA ACATGCCAGT GGCTGCTCGT GAGGCTTCGG TCTACACCGC TATGACCATC GCTGAGTACT ACCGCTCGAT GGGTCTCAAA GTACTCCTAA TGGCTGACTC GACCTCTCGC TGGGCACAGG CACTGCGTGA	50 100 150 200 250 300
.30	GATGTCTAAC CGTCTAGAGG AGCTGCCTGG ACCAGATGCA TTCCCGATGG ACTTGTCGGC TATCGTGGCA AACTTCTACG CTCGTGCCGG CTTCGTCTAT CTCAACAACG GTGAGACAGG TTCTGTAACC TTCATCGGTA CGGTCTCTCC AGC	350 400 450 453
35	2) INFORMATION FOR SEQ ID NO: 932	
40	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 835 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear 	
45	(ii) MOLECULE TYPE: Genomic DNA(vi) ORIGINAL SOURCE:(A) ORGANISM: Listeria monocytogenes(B) STRAIN: ATCC 15313	
50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932	
55	CGGAGCTATC TTAGTAGTAT CTGCTGCTGA TGGCCCAATG CCACAAACTC GTGAACATAT CTTACTTTCA CGTCAAGTTG GTGTTCCATA CATCGTTGTA TTCATGAACA AATGTGACAT GGTTGACGAT GAAGAATTAC TAGAATTAGT TGAAATGGAA ATTCGTGATC TATTAACTGA ATATGAATTC CCTGGCGATG ACATTCCTGT AATCAAAGGT TCAGCTCTTA AAGCACTTCA AGGTGAAGCT GACTGGGAAG CTAAAATTGA CGAGTTAATG GAAGCTGTAG ATTCTTACAT TCCAACTCCW GAACGTGATA CTGACAAACC ATTCATGATG CCAGTTGAGG	50 100 150 200 250 300 350
60	ATGTATTCTC AATCACTGGT CGTGGAACAG TTGCAACTGG ACGTGTTGAA CGTGGACAAG TTAAAGTTGG TGACGAAGTA GAAGTTATCG GTATCGAAGA	400 450

CA 02283458 1999-09-28

5	AGAAAGCAAA AAAGTAGTAG TAACTGGAGT AGAAATGTTC CGTAAATTAC TAGACTACGC TGAAGCTGGC GACAACATTG GCGCACTTCT ACGTGGTGTT GCTCGTGAAG ATATCCAACR TGGTCAAGTA TTAGCTAAAC CAGGTTCGAT TACTCCACAC ACTAACTTCA AAGCTGAAAC TTATGTTTTA ACTAAAGAAG AAGGTGGACG TCACACTCCA TTCTTCAACA ACTACCGCCC ACAATTCTAT TTCCGTACTA CTGACGTAAC TGGTATTGTT ACACTTCCAG AAGGTACTGA AATGGTAAYG CCTGGTGATA ACATTGAGCT TGCAGTTGAA CTAATTGCAC AATCGCTAT CGAAGACGGT ACTAAATTCT CTATC 835	
10		
15	2)INFORMATION FOR SEQ ID NO: 933 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 24 bases (B) TYPE: Nucleic acid	
	(C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
20	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933	
25	CATCATCGTI TTCMTGAACA ARTG	24
	2) INFORMATION FOR SEQ ID NO: 934	
30	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 24 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear 	
35	(ii) MOLECULE TYPE: DNA	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934	
40	TCACGYTTRR TACCACGCAG IAGA	24
	2) INFORMATION FOR SEQ ID NO: 935	
45	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single 	
50	(D) TOPOLOGY: Linear	
	(ii) MOLECULE TYPE: DNA	
55	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935	
22	GGIAARWSIC ARYTITGYCA YAC	23
60	2) INFORMATION FOR SEQ ID NO: 936	

5	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
	(ii)	MOLECULE TYPE: DNA	
10	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 936	
	TCISIY	TCIG GIARRCAIGG	20
. -			
15	2) INFO	RMATION FOR SEQ ID NO: 937	
20	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
0 F	(ii)	MOLECULE TYPE: DNA	
25	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 937	
	ATIACI	GARG YITTYGGIGA RTT	23
30	2) INFO	RMATION FOR SEQ ID NO: 938	
35	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear	
	(ii)	MOLECULE TYPE: DNA	
40	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 938	
	CYIGTI	GYIS WIGCRTGIGC	20
45			
	2) INFO	RMATION FOR SEQ ID NO: 939	
50	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 1203 bases (B) TYPE: Nucleic acid (C) STRANDEDNESS: Double (D) TOPOLOGY: Linear	
55	(ii)	MOLECULE TYPE: Genomic DNA	
60	(vi)	ORIGINAL SOURCE: (A) ORGANISM: Saccharomyces cerevisiae (C) ACCESSION NUMBER: D10023	
60			

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939

	ATGTCTCAAG	TTCAAGAACA	ACATATATCA	GAGTCACAGC	TTCAGTACGG	50
_	GAACGGTTCG	TTGATGTCCA	CTGTACCAGC	AGACCTTTCA	CAGTCAGTCG	100
	TTGATGGAAA	CGGCAACGGT	AGCAGCGAAG	ATATTGAGGC	CACCAACGGC	150
5	TCCGGCGATG	GTGGCGGATT	GCAGGAGCAA	GCGGAAGCGC	AAGGTGAAAT	200
	GGAGGATGAA	GCATACGATG	AAGCTGCCTT	AGGTTCGTTT	GTGCCAATAG	250
	AAAAACTGCA	AGTGAACGGG	ATTACTATGG	CGGATGTGAA	AAAACTAAGG	300
	GAGAGTGGGC	TTCACACTGC	TGAAGCGGTA	GCATATGCTC	CCAGAAAGGA	350
10	TTTATTGGAA	ATCAAAGGTA	TATCGGAAGC	TAAGGCAGAT	AAGTTGCTAA	400
10	ACGAAGCGGC	AAGGCTAGTG	CCTATGGGAT	TTGTCACGGC	TGCTGATTTT	450
	CATATGAGAA	GATCGGAGCT	GATTTGTTTG	ACAACGGGTT	CTAAGAATTT	500
	GGACACTCTT	TTGGGTGGTG	GTGTGGAAAC	TGGTTCTATT	ACTGAGCTTT	550
	TCGGTGAATT	CAGGACAGGT	AAGTCCCAGC	TATGTCACAC	TTTGGCCGTG	600
15	ACATGCCAAA	TTCCATTGGA	TATTGGTGGC	GGTGAAGGTA	AGTGTTTGTA	650
13	TATCGATACC	GAAGGTACTT	TCAGGCCGGT	AAGATTGGTA	TCCATAGCTC	700
	AGCGGTTCGG	ATTAGACCCG	GATGATGCTT	TGAACAACGT	TGCGTATGCA	750
	AGAGCCTATA	ACGCCGATCA	TCAGTTAAGA	CTTCTGGATG	CTGCTGCCCA	800
	AATGATGAGC	GAGTCTCGGT	TTTCCTTGAT	TGTGGTCGAT	TCTGTTATGG	850
20	CTCTATACCG	TACGGATTTT	TCTGGTCGTG	GTGAACTAAG	CGCAAGGCAA	900
	ATGCATTTAG	CCAAATTTAT	GCGTGCTTTG	CAAAGGCTGG	CCGACCAATT	950
	TGGTGTTGCA	GTCGTCGTTA	CTAACCAAGT	GGTCGCCCAA		1000
25	GTATGGCTTT	TAATCCAGAT	CCAAAGAAGC	CTATCGGTGG	TAATATTATG	1050
	GCACATTCTT	CCACCACGCG	ATTAGGTTTC	AAAAAGGGTA	the second secon	1100 1150
	AAGATTATGC	AAAGTTGTTG	ACTCACCTTG	CTTACCAGAG		1200
	TGTTCGCGAT	CTATGAAGAT	GGTGTTGGTG	ACCCCAGAGA	AGAAGACGAG	1200
	TAG					1203

2) INFORMATION FOR SEQ ID NO: 940

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1800 bases
 - (B) TYPE: Nucleic acid
 - (C) STRANDEDNESS: Double
 - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Genomic DNA
- 40 (vi) ORIGINAL SOURCE:

- (A) ORGANISM: Saccharomyces cerevisiae
- (B) STRAIN: GRF88
- (C) ACCESSION NUMBER: M87549
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940

	CGATCCAATT	GCTGGTCTTA	AGATGCATTT	GATTGATCTA	GGTATTGCCA	50
	CTGAAGCTGA	AGTCAAAGCT	TACGACAAGT	CCGCTAGAAA	ATACGTTGAC	100
F 0	GAACAAGTTG	AATTAGCTGA	TGCTGCTCCT		CCAAATTATC	150
50	CATCTTGTTT	GAAGACGTCT	ACGTGAAAGG	TACAGAAACT	CCAACCCTAA	200
	GAGGTAGGAT			TCAAAAAGCA	AGGTTTTGCC	250
	TCTAGGGATT		TAAGGAAAAA	ATAAAATA	GTGCTGTGAT	300
	CGCATGATAT		AAGCGCCATT	TTATAGCAAG	AAATGTAAGT	350
55	CAAGTATATT	TTAACTGTAT	ATACAACAAT	ATGACTCTTT	TTTATGCCTT	400
55	GTTGTTTTTC	TTCGGGTTTT	CCCACACATT	GTGTGGAGAG	ATAGTTATTA	450
		AATAGCCGCC	CAAGGATAAA	CTTTTATATA	AAGGGAAGGG	500
	TAGTTGACCC	AAAAATTTGG	ATTCTACTTT	CCAGATTTAC	TTTCACCCTT	550
	TTATATTTGC	·	TATGCCAATC	AGGAAAGCAT		600
60	ATGTCTGTTA		GATCGATAGT	GATACAGCAA	AAAATATTCT	650

	TAGTGTAGAT	GAATTACAGA	ACTATGGTAT	TAATGCCTCA	GATCTTCAAA	700
	AATTGAAGTC	TGGTGGGATA	TACACAGTCA	ATGTATGTTA	TAATAACATT	750
	TTTAAAACCT	CTGCTGTAGA	GGTTCTTTCC	CCCTTTCTTT	TACTAACTAA	800
	TAATTTGGAA	AGGAACTTTT	ATAGACCGTT	TTGTCAACAA	CAAGAAGACA	850
5	TCTATGTAAA	ATTAAAGGGT	TAAGTGAGGT	GAAAGTGGAA	AAAATTAAAG	900
	AAGCTGCTGG	AAAAATCATA	CAGGTGGGAT	TTATCCCCGC	TACTGTACAA	950
	TTAGATATAA	GACAGCGTGT	GTACTCCTTA	TCAACTGGAT	CTAAGCAACT	1000
	AGATTCAATC	CTAGGTGGTG	GAATAATGAC	AATGAGTATC	ACTGAAGTAT	1050
	TTGGTGAATT	TAGGTGTGGT	AAGACACAGA	TGTCTCATAC	TTTGTGTGTT	1100
10	ACCACGCAGC	TTCCGAGGGA	AATGGGTGGT	GGTGAAGGGA	AAGTAGCATA	1150
	TATTGATACA	GAAGGCACTT	TCAGGCCCGA	GAGGATTAAG	CAAATTGCAG	1200
	AAGGTTATGA	ATTGGATCCC	GAGTCATGTT	TGGCAAACGT	TTCATATGCT	1250
	AGAGCCTTGA	ATAGTGAACA	TCAAATGGAA	CTTGTTGAAC	AATTGGGTGA	1300
	AGAACTTAGT	TCTGGAGATT	ATCGCCTTAT	CGTGGTAGAT	TCTATAATGG	1350
15	CAAACTTCAG	AGTAGACTAC	TGCGGTAGAG	GTGAACTAAG	CGAAAGACAG	1400
	CAAAAGCTAA	ATCAACATCT	TTTCAAATTG	AATAGATTGG	CAGAGGAATT	1450
	TAATGTTGCA	GTATTTCTGA	CAAACCAAGT	TCAATCAGAC	CCAGGTGCTT	1500
	CTGCATTATT	TGCCTCGGCA	GATGGTAGGA	AACCAATTGG	AGGGCACGTT	1550
	CTGGCACATG	CGTCAGCAAC	AAGGATTTTG	TTGAGAAAAG	GGCGTGGTGA	1600
20	CGAAAGAGTT	GCCAAGTTAC	AAGATTCCCC	AGATATGCCT	GAAAAAGAAT	1650
	GTGTCTACGT	AATTGGTGAA	AAAGGTATTA	CCGATTCAAG	TGACTAGTTT	1700
	TTGTATACTT	TTTTAATGAA	GATGACATTG	CTCCTTTATT	AAACTTTTCT	1750
	TTTACTTTGT	GTTACTAATA	TTATTAATAT	CTTGTTATGA	TTCTTTGTTT	1800

DEMANDES OU BREVETS VOLUMINEUX

LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET COMPREND PLUS D'UN TOME.

CECI EST LE TOME 2 DE 2

NOTE: Pour les tomes additionels, veuillez contacter le Bureau canadien des brevets

JUMBO APPLICATIONS/PATENTS

THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE THAN ONE VOLUME

THIS IS VOLUME ___ OF ____

NOTE: For additional volumes-please contact the Canadian Patent Office

What is claimed is:

- 1. A repertory of nucleic acid sequences used for the detection and/or identification of a bacterial, fungal or parasitical species, genus, family or group, which repertory is created by amplifying the nucleic acids of a plurality of determined bacterial, fungal and parasitical species with any combination of the primer pairs shown in annex I, annex II and annex XXI.
- 2. A nucleic acid used for universal detection of any bacterium, fungus or parasite which is derived from the repertory of claim 1.

A nucleic acid used for universal detection as set forth in claim 2, which has a nucleic acid sequence of at least 12 nucleotides capable of hybridizing with said any bacterium, fungus or parasite and with any one of SEQ ID NOs: 543, 556-574, 636-655, 658-661, 664, 681-683, 694, 696-697, 699-700, 708, 812-815, 911-917, 919-922.

- 4. A nucleic acid used for the specific and ubiquitous detection and for identification of a bacterial, fungal or parasital species, genus, family or group, which is derived from the repertory of claim 1.
- 5. A nucleic acid as set forth in claim 4, which has a nucleic acid sequence of at least 12 nucleotides capable of hybridizing with the nucleic acids of said bacterial, fungal or parasitical species, genus, family or group and with any one of:

SEQ ID NOs:	
630, 629	for the detection and/or identification of Chlamydia pneumoniae
554, 555	for the detection and/or identification of Chlamydia trachomatis
551, 552	for the detection and/or identification of Neisseria gonorrhoeae
549, 550, 627, 625, 628, 626, 582, 583	for the detection and/or identification of Streptococcus agalactiae
576, 632, 631,	to the detection and or identification of the option of a guidante
633, 634, 635	for the detection and/or identification of Candida spp.
545, 546	for the detection and/or identification of Corynebacterium spp.
656, 657, 271	for the detection and/or identification of Enterococcus spp.
541, 542, 544	for the detection and/or identification of Pseudomonads group

553, 575, 707,	
605, 606	for the detection and/or identification of Staphylococcus spp.
547, 548	for the detection and/or identification of Streptococcus spp.
539, 540	for the detection and/or identification of Mycobacteriaceae family
577	for the detection and/or identification of Candida albicans
578	for the detection and/or identification of Candida dubliniensis
580, 603	for the detection and/or identification of Enterococcus faecalis
602	for the detection and/or identification of Enterococcus faecium
604	for the detection and/or identification of Enterococcus gallinarum
579	for the detection and/or identification of Escherichia coli
581	for the detection and/or identification of Haemophilus influenzae
584, 585, 586,	
587, 588	for the detection and/or identification of Staphylococcus aureus
589, 590, 591,	Standard and a standa
592, 593	for the detection and/or identification of Staphylococcus epidermidis
594, 595	for the detection and/or identification of Staphylococcus haemolyticus
596, 597, 598	for the detection and/or identification of Staphylococcus hominis
599, 600,	for the detection and/or identification of Staphylococcus saprophyticus
601, 695	and/or identification of Enterococcus casseliflavus-flavescens-gallinarum
820, 821, 822	for the detection and/or identification of Trypanosoma brucei
794, 795	for the detection and/or identification of Trypanosoma cruzi
798, 799, 800,	•
801, 802, 803,	
804, 805, 806, 807	for the detection and/or identification of Cryptosporidium parvum
825, 826	for the detection and/or identification of Bordetella spp.
796, 797, 808	Tot the detection and or restriction as a series
809, 810, 811	for the detection and/or identification of Clostridium spp.
703, 704, 705,	
706, 793	for the detection and/or identification of Entamoeba spp.
816, 817, 818,	
819	for the detection and/or identification of Giardia spp.
701, 702	for the detection and/or identification of <i>Leishmania</i> spp.
823, 824	for the detection and/or identification of Trypanosoma spp.
923, 924, 925,	
	for the detection and/or identification of Kinetonlastidae group
926, 927, 928 933, 934	for the detection and/or identification of Kinetoplastidae group for the detection and/or identification of Enterobacteriaceae group

- 6. A method for the specific detection or identification of a bacterial, fungal or parasitical species, genus, family or group in a sample, using a panel of probes or amplification primers or both, each individual probe or primer being derived from a nucleic acid as defined in claim 4, the method comprising the step of contacting the nucleic acids of the sample with said primers or probes under suitable conditions of hybridization or of amplification and detecting the presence of hybridized probes or amplified products as an indication of the presence of said specific bacterial, fungal or parasitical species, genus, family or group.
- 7. A method as set forth in claim 6, which is for the detection or identification of bacterial species, genus, family or group.
- 8. A method as set forth in claim 7, which further comprises probes or primers, or both, for the detection of at least one of the antibiotic resistance genes listed in Table 5.
- 9. A method as set forth in claim 7 or 8, which further comprises probes or primers, or both, for the detection of at least one of the toxin genes listed in Table 6.

A method as defined in claim 6, which further comprises the universal detection of any species, genus, family or group of bacteria, fungi or parasites.

11. A method as defined in any one of claims 7 to 9, which further comprises the universal detection of any species, genus, family or group of bacteria.

Figure 1: atpD sequences databases and main subsets

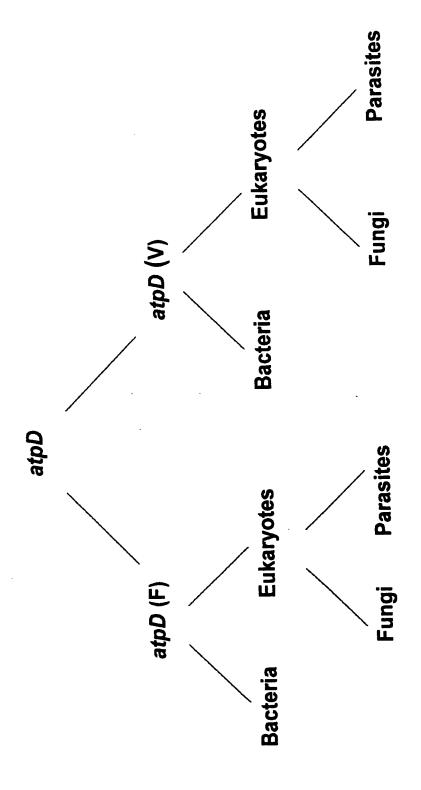


Figure 2: tuf sequences databases and main subsets

